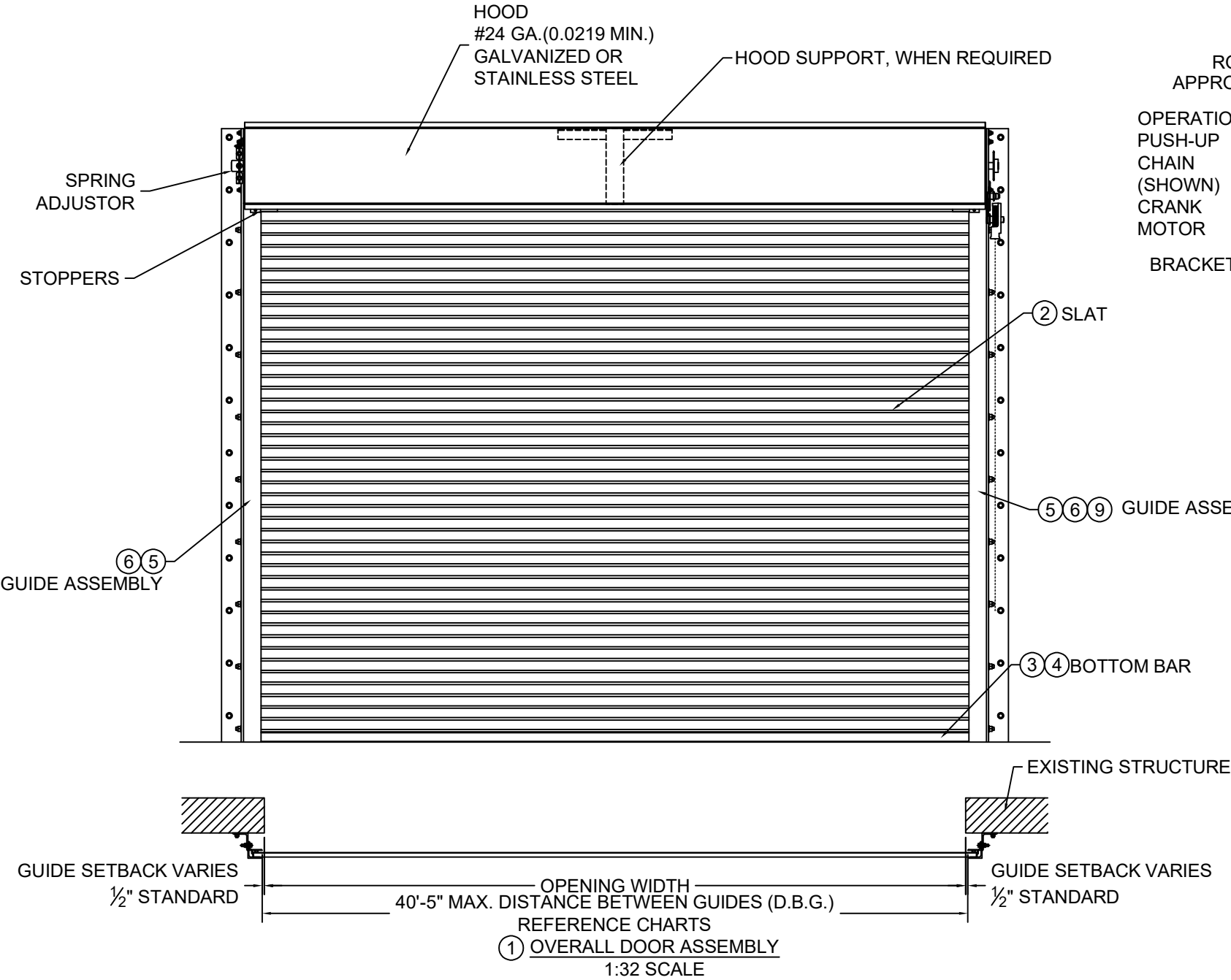
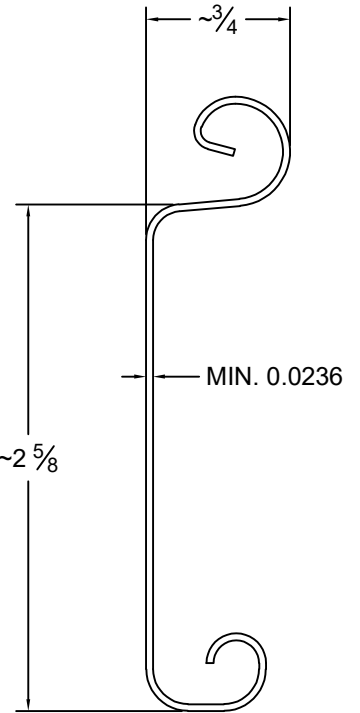
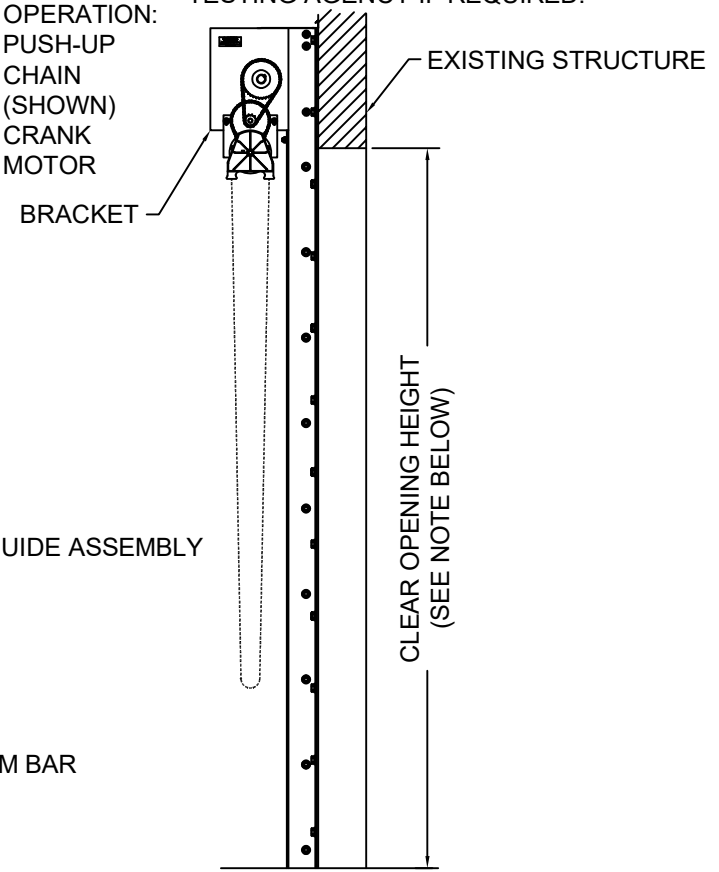


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ROLL-UP MECHANISM NOT INCLUDED IN THIS APPROVAL. MUST BE CERTIFIED BY AN INDEPENDENT TESTING AGENCY IF REQUIRED.



2 SLAT DETAIL
TYPICAL SECTION

ASTM A653 HSLAS TYPE B GRADE 40 G40 OR
ASTM A653 HSLAS TYPE A GRADE 40 G40 OR
ASTM A653 STRUCTURAL STEEL GRADE 40 G40
OR TYPE 304 STAINLESS STEEL (MIN. YIELD 40,000 psi)
OR TYPE 316 STAINLESS STEEL (MIN. YIELD 40,000 psi)
OR TYPE 430 STAINLESS STEEL (MIN. YIELD 40,000 psi)
OR TYPE 201 STAINLESS STEEL (MIN. YIELD 40,000 psi)
FULL SCALE

NOTE: WIND LOADS SPECIFIED IN TABLES ARE ACCEPTABLE FOR ANY C.O.H.. FOR GREATER THAN 30 FT, C.O.H., MOUNTING CONDITIONS SHALL BE DETERMINED ON A SITE SPECIFIC BASIS.

Shawn Kelley

Shawn Patrick Kelley
LICENSED PROFESSIONAL ENGINEER
No 58299
Digitally signed by Shawn Kelley
Date: 2025.12.08 17:38:49 -05'00'



24 ELMWOOD AVE 1901 S. LITCHFIELD RD
MOUNTAINTOP, PA GOODYEAR, AZ

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F: 800.526.0841
E: ADS@CORNELLIRON.COM

Unless otherwise specified, dimensions are in inches & tolerances are:

0.000 = +/- 0.031
FRACTIONAL = +/- 1/32
ANGLES = +/- 1/2 DEG

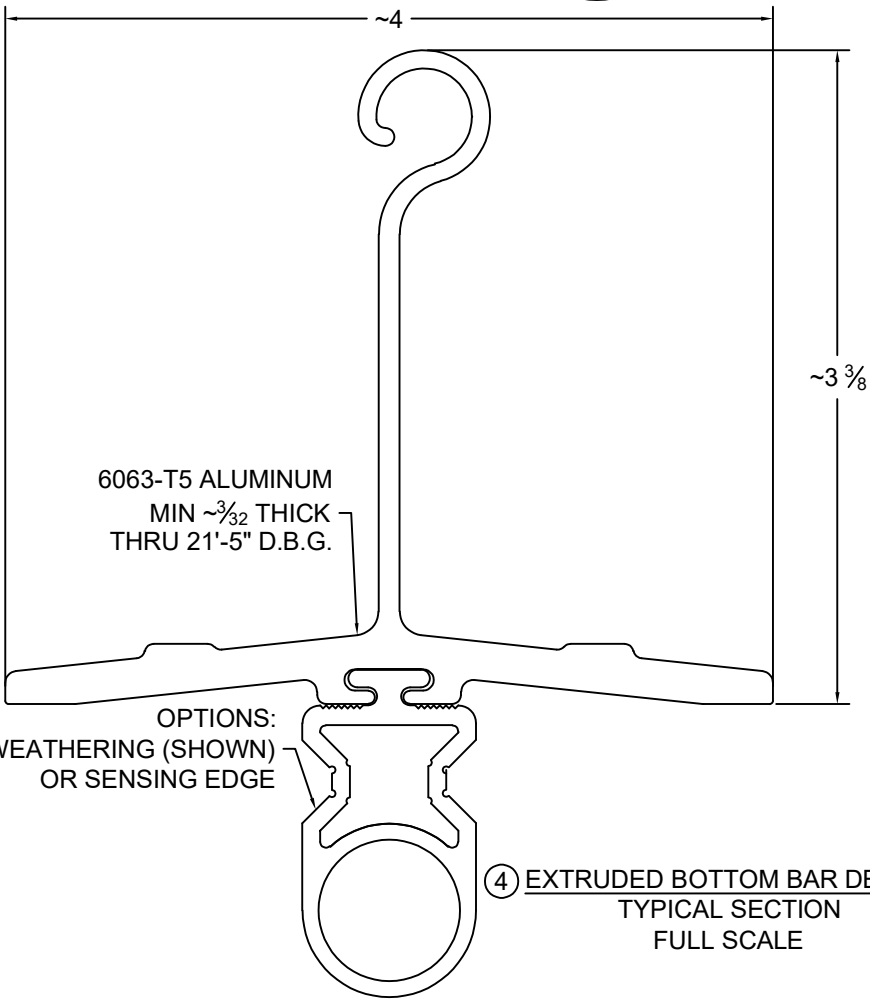
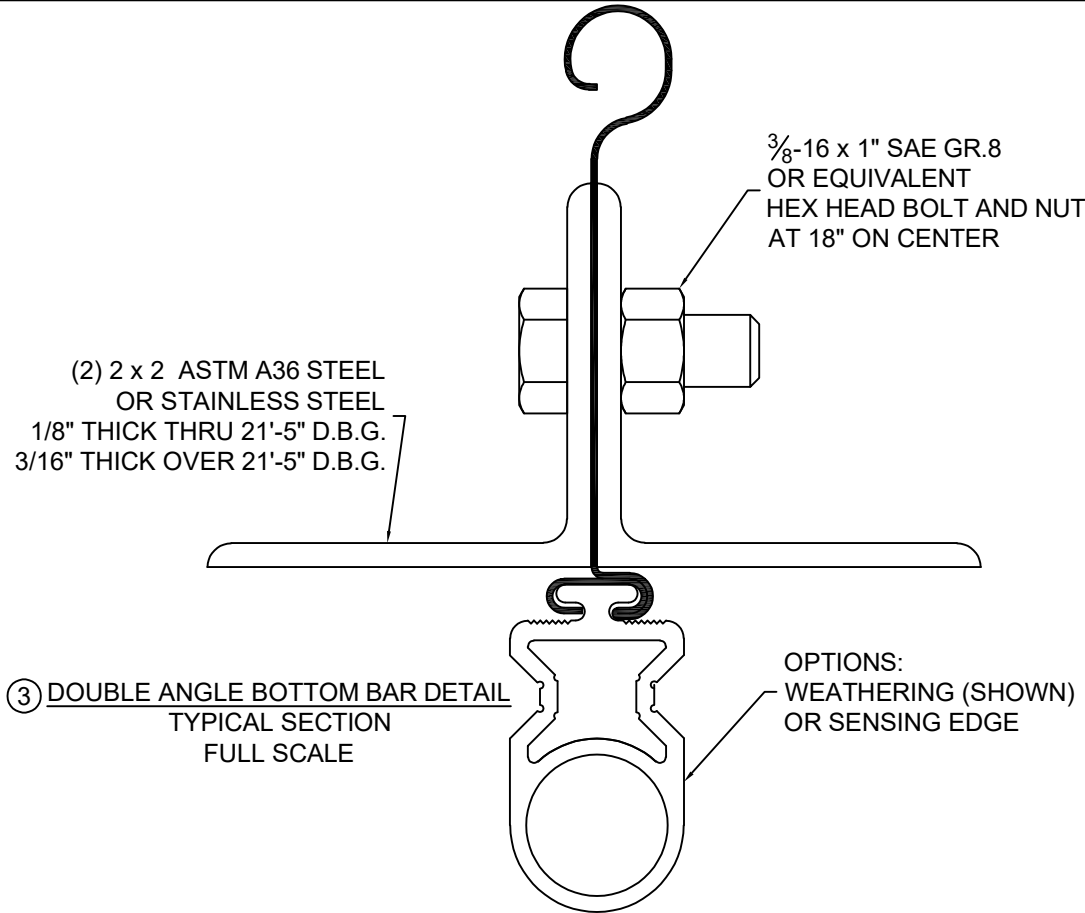
TITLE: WIND LOAD CONFIGURATION
NON-INSULATED ROLLING STEEL DOOR
CP0020 SLAT IMPACT RATED

DRAWN BY: KAD
SIZE: B
SCALE: AS NOTED
SHEET: 1/43

DWG NO: ES-16-134-CIW

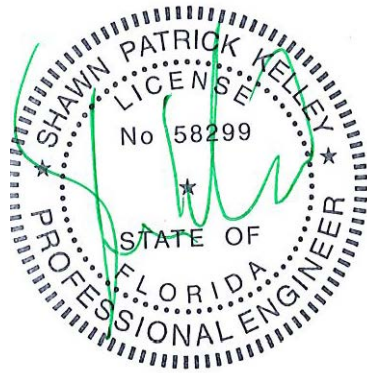
REVIEWED FOR SPECIFIED DOOR COMPONENTS ONLY, EXISTING STRUCTURE NOT ANALYZED

L'TR	REVISION	DATE	BY	E.C.O.
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GENERAL NOTES:

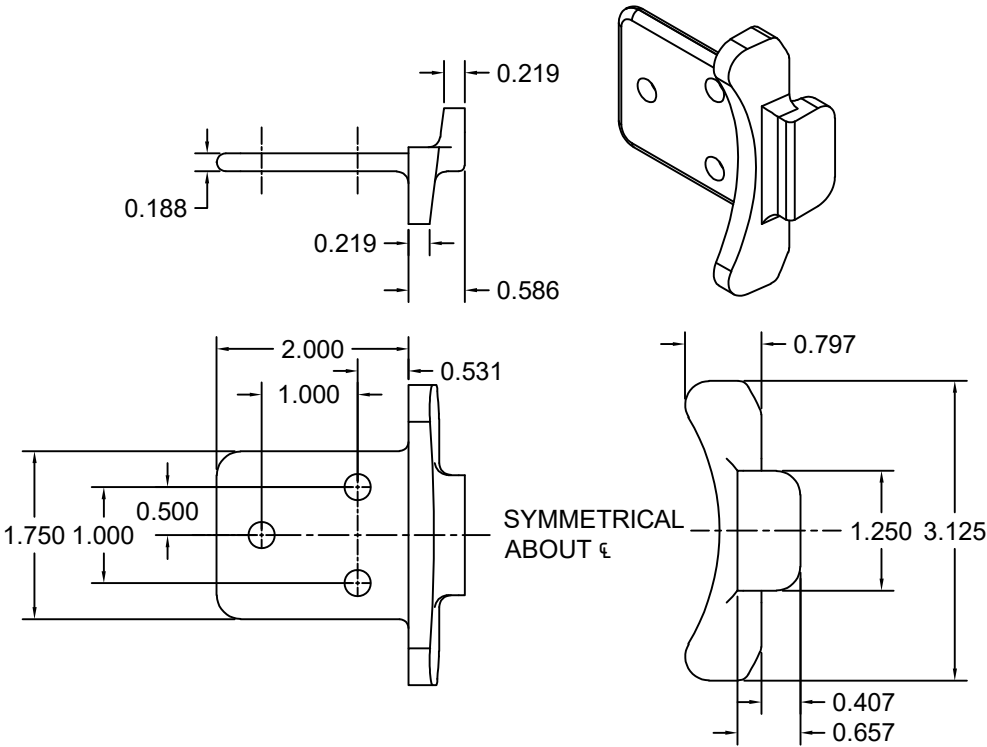
1. THESE PRODUCT EVALUATION DOCUMENTS REPRESENT A ROLL-UP DOOR ASSEMBLY DESIGNED AND TESTED IN ACCORDANCE WITH THE STANDARD BUILDING CODE, THE INTERNATIONAL BUILDING CODE, AND THE FLORIDA BUILDING CODE.
2. THIS ROLL-UP DOOR HAS BEEN TESTED FOR UNIFORM STATIC PRESSURE, IMPACT AND FATIGUE RESISTANCE IN ACCORDANCE WITH THE FBC TEST PROTOCOLS FOR HIGH VELOCITY HURRICANE ZONES TAS 201, TAS 202, AND TAS 203.
3. A 33% INCREASE IN ALLOWABLE STRESS HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT.
4. DETERMINE THE POSITIVE AND NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY.
5. THESE PRODUCT EVALUATION DOCUMENTS ARE PREPARED BY THE PRODUCT ENGINEER AND ARE GENERIC. THEY DO NOT INCLUDE INFORMATION PREPARED FOR A SPECIFIC SITE.
6. THESE PRODUCT EVALUATION DOCUMENTS ARE NOT VALID FOR PERMIT WITHOUT ORIGINAL SIGNATURE, DATE AND EMBOSSED SEAL ON EACH PERMIT COPY, WHETHER OR NOT A MASTER APPROVAL DOCUMENT IS ON FILE WITH A MUNICIPALITY OR OTHER GOVERNING AGENCY.
7. THESE PRODUCT EVALUATION DOCUMENTS ARE SUITABLE TO BE APPLIED BY THE CONTRACTOR PROVIDED THE CONTRACTOR DOES NOT DEVIATE FROM THE CONDITIONS DETAILED HEREIN AND THE CONTRACTOR VERIFIES THE EXISTING STRUCTURE IS CAPABLE OF SUPPORTING THE SUPERIMPOSED LOADS Vx & Vy ON THE JAMBS OF THE DOOR.
8. ALTERATIONS OR ADDITIONS TO THIS DOCUMENT ARE NOT PERMITTED.
9. WHEN THE SITE CONDITIONS DEVIATE FROM THESE PRODUCT EVALUATION DOCUMENTS, SITE SPECIFIC DOCUMENTS SHALL BE PREPARED BY A DULY LICENSED AND REGISTERED ENGINEER OR ARCHITECT.
10. IF THE DEVIATING SITE SPECIFIC DOCUMENTS ARE PREPARED BY A DELEGATED REGISTERED ENGINEER OR ARCHITECT, SAID DOCUMENTS SHALL BEAR THE DATE, SIGNATURE, AND EMBOSSED SEAL OF THE DELEGATED ENGINEER OR ARCHITECT AND SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW.
11. ALL HARDWARE SHALL BE GALVANIZED STEEL, PLATED STEEL OR STAINLESS STEEL
12. ALL WINDLOCK RIVETS SHALL BE 1/4" STEEL RIVETS IFI GRADE 30 WITH A MINIMUM TENSILE STRENGTH OF 1,850 Lbs., AND SHEAR STRENGTH OF 2,400 Lbs., U.O.N.. RIVETS TO BE INSTALLED IN ALL WINDLOCK HOLES.
13. ENDLOCKS/WINDLOCKS SHALL BE CAST MALLEABLE IRON TYPE 32510 PER ASTM A47 OR CAST DUCTILE IRON PER ASTM A536 GRADE 65-45-12.
14. ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH A.W.S. SPECIFICATIONS, LATEST EDITION. ALL WELDING ELECTRODES SHALL CONFORM TO A.W.S. A5.1 GRADE E-70. MINIMUM WELDING PROCESSES SHALL BE ARC WELDING A.W.S. E7014 OR MIG WELDING A.W.S. ER70S-6.
15. ANCHOR NOTES:
 - A. EMBEDMENT LENGTH DOES NOT INCLUDE STUCCO FINISH.
 - B. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
 - C. ANCHOR CAPACITY FOR THIS ROLL-UP DOOR IS BASED ON MIN. 4,000 P.S.I. CONCRETE EXCEPT WHERE NOTED.
 - D. FOR MINIMUM EMBEDMENT AND MINIMUM EDGE DISTANCE, REFER TO TABLES.
16. DOOR MAY BE INSTALLED ON THE INSIDE OR OUTSIDE OF AN EXTERIOR WALL
17. ALL SHAPES USED FOR GUIDE ASSEMBLIES MUST CONFORM TO ATSM A36 FOR STEEL OR ASTM A276 FOR TYPES 304 OR 316 WITH A MINIMUM 36 KSI YIELD STRENGTH.



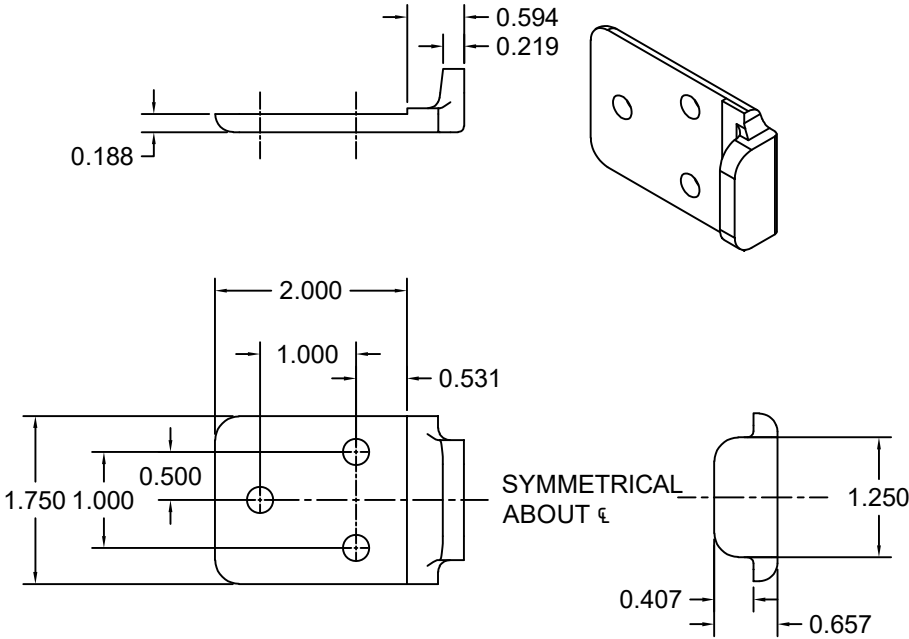
CORNELL Innovative door solutions.	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are: 0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG			
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM					
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT IMPACT RATED			DRAWN BY: KAD	SIZE: B	SCALE: AS NOTED	SHEET: 2/43
			DWG NO: ES-16-134-CIW			

REVIEWED FOR SPECIFIED DOOR COMPONENTS ONLY, EXISTING STRUCTURE NOT ANALYZED

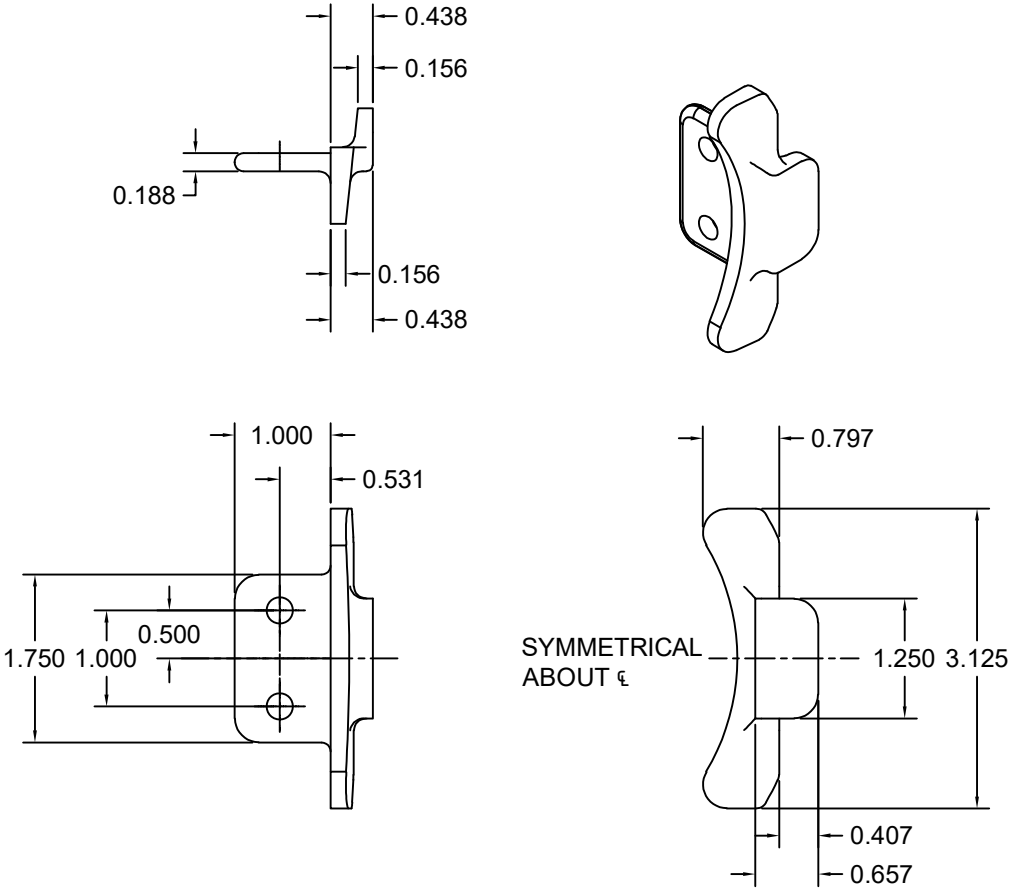
L'TR	REVISION	DATE	BY	E.C.O.
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⑪ ENDLOCK / WINDLOCK DETAIL, CP1152
 CAST MALLEABLE IRON ASTM A47, GRADE 32510, OR
 DUCTILE IRON PER ASTM A536 GRADE 65-45-12, GALVANIZED IN ACCORDANCE WITH
 ASTM A123, GRADE 85 ZINC-COATING
 1/2 SCALE



⑫ WINDLOCK DETAIL, CP1153
 CAST MALLEABLE IRON ASTM A47, GRADE 32510, OR
 DUCTILE IRON PER ASTM A536 GRADE 65-45-12, GALVANIZED IN
 ACCORDANCE WITH ASTM A123, GRADE 85 ZINC-COATING
 1/2 SCALE



⑬ ENDLOCK / WINDLOCK DETAIL, CP1151
 CAST MALLEABLE IRON ASTM A47, GRADE 32510, OR
 DUCTILE IRON PER ASTM A536 GRADE 65-45-12, GALVANIZED IN ACCORDANCE WITH
 ASTM A123, GRADE 85 ZINC-COATING
 1/2 SCALE



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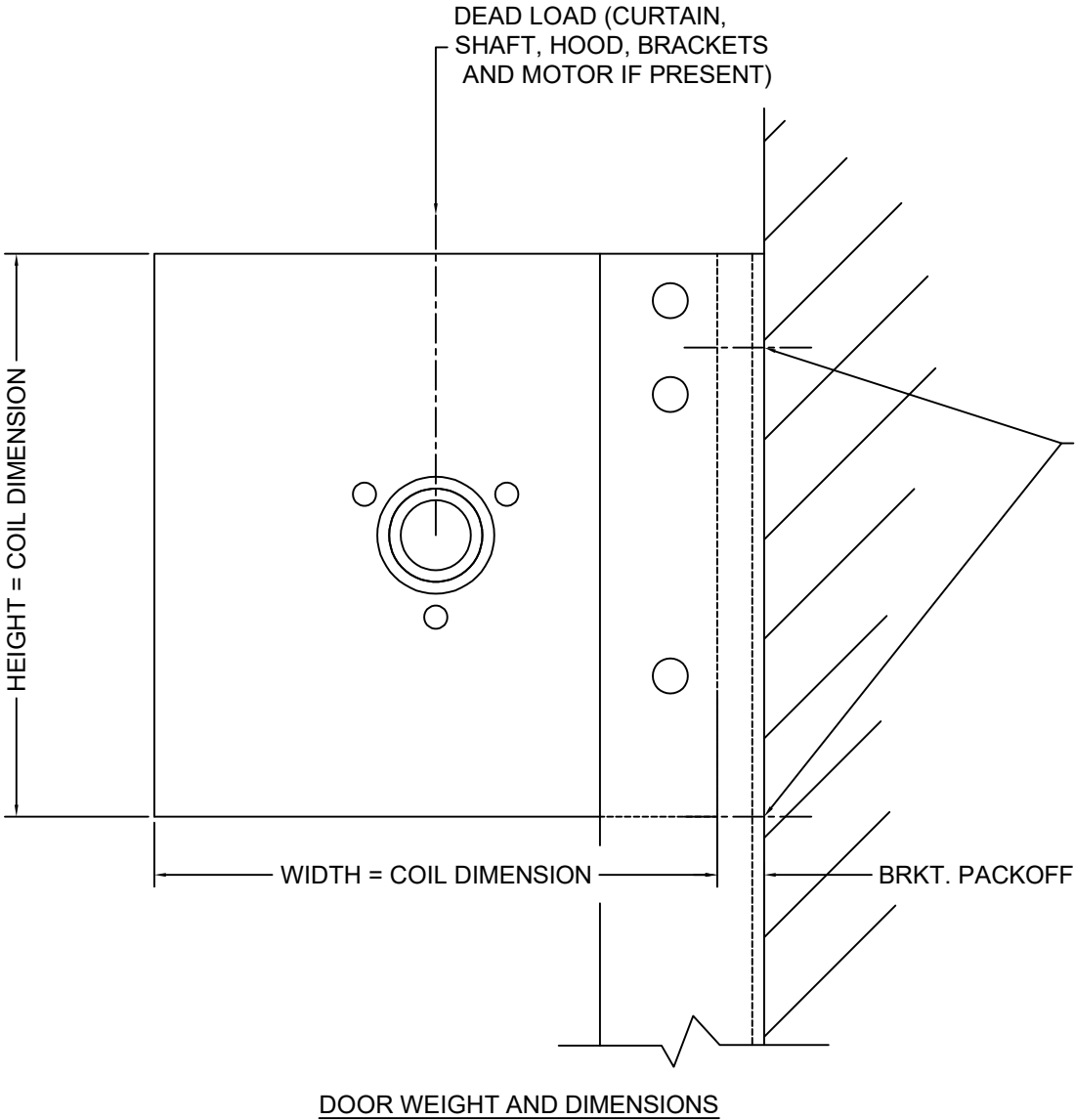
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 NON-INSULATED ROLLING STEEL DOOR
 CP0020 SLAT IMPACT RATED

DRAWN BY: KAD
 DWG NO: ES-16-134-CIW

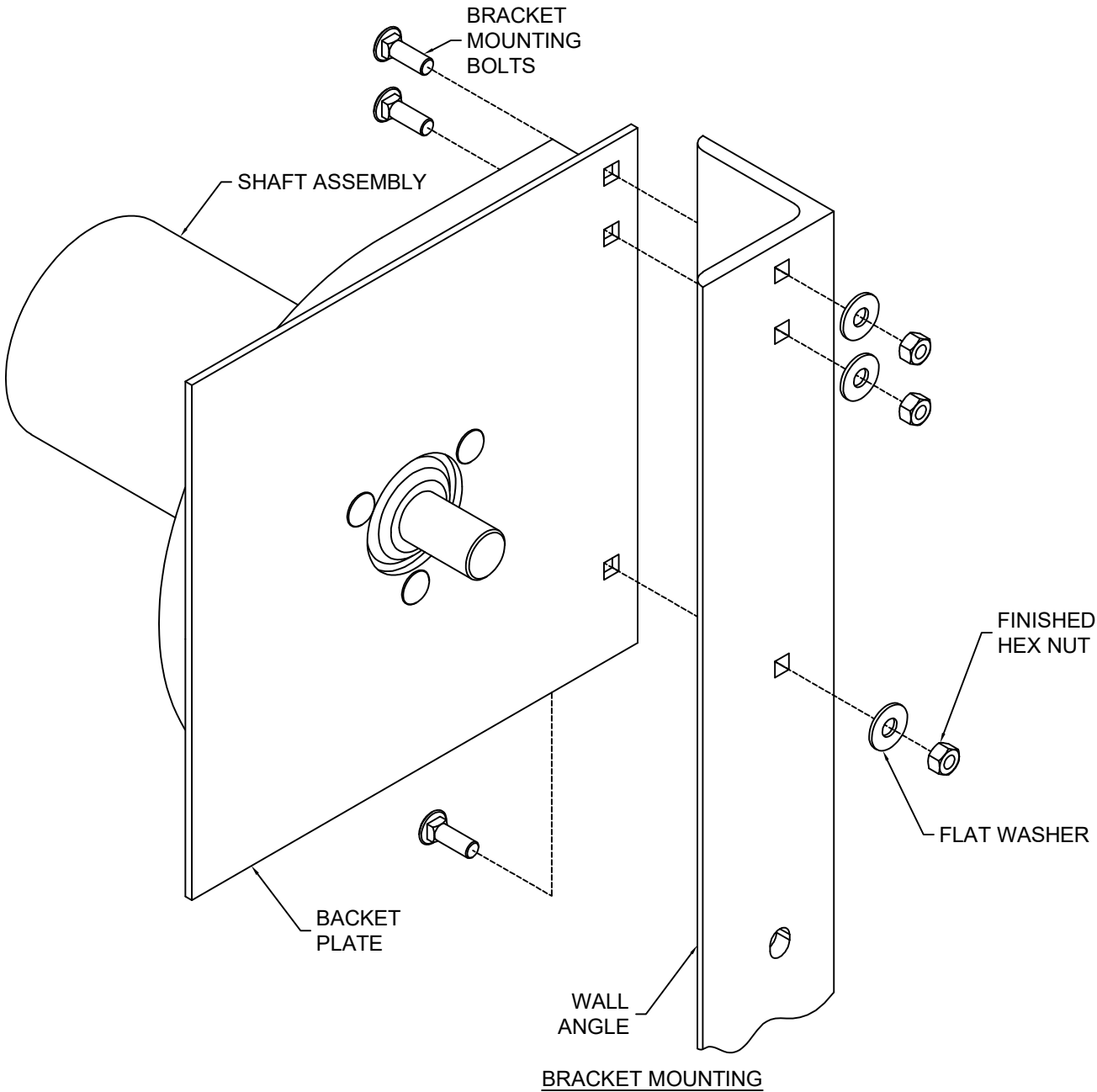
SIZE: B
 SCALE: AS NOTED
 SHEET: 4/43

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FOR "WALL ANGLE" TO WALL CONNECTION, REF. TABLES BASED ON THE SPECIFIC INSTALLATION. USE AT LEAST ONE FASTENER OR WELD AT THE INDICATED LOCATIONS.

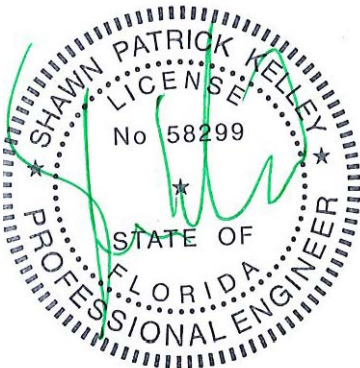


NOTE:

1. WHEN MOTOR IS PROVIDED, HEIGHT OR WIDTH DIMENSION MAY INCREASE UP TO 2-1/2" BASED ON MOTOR LOCATION. WHEN AN 8" DIAMETER OR LARGER SHAFT ASSEMBLY IS PROVIDED, HEIGHT DIMENSION INCREASES BY 2".

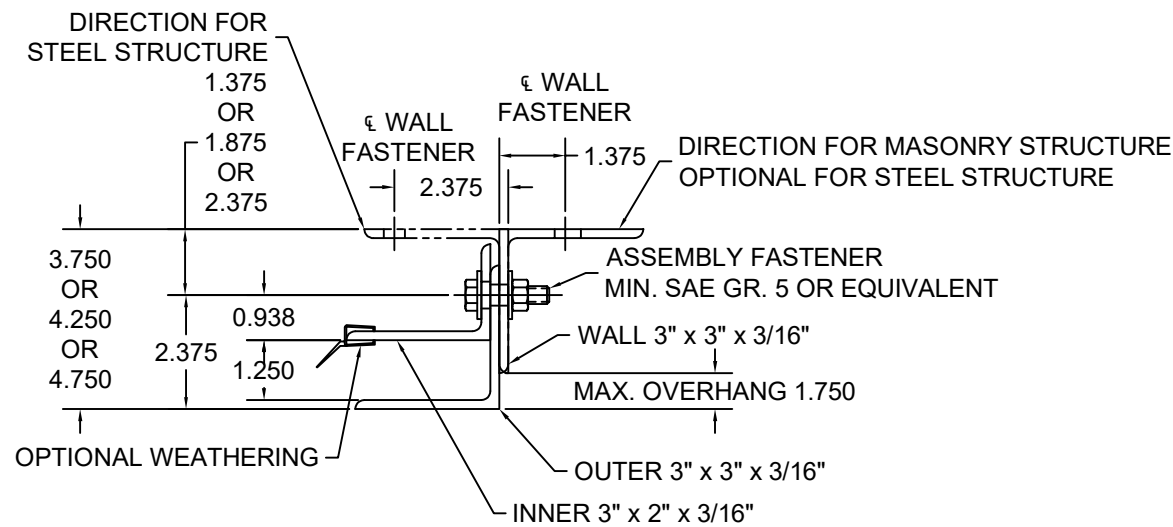
NOTE:

1. STANDARD BRACKET MOUNTING DETAIL IS DEPICTED, OTHER MOUNTINGS ARE AVAILABLE

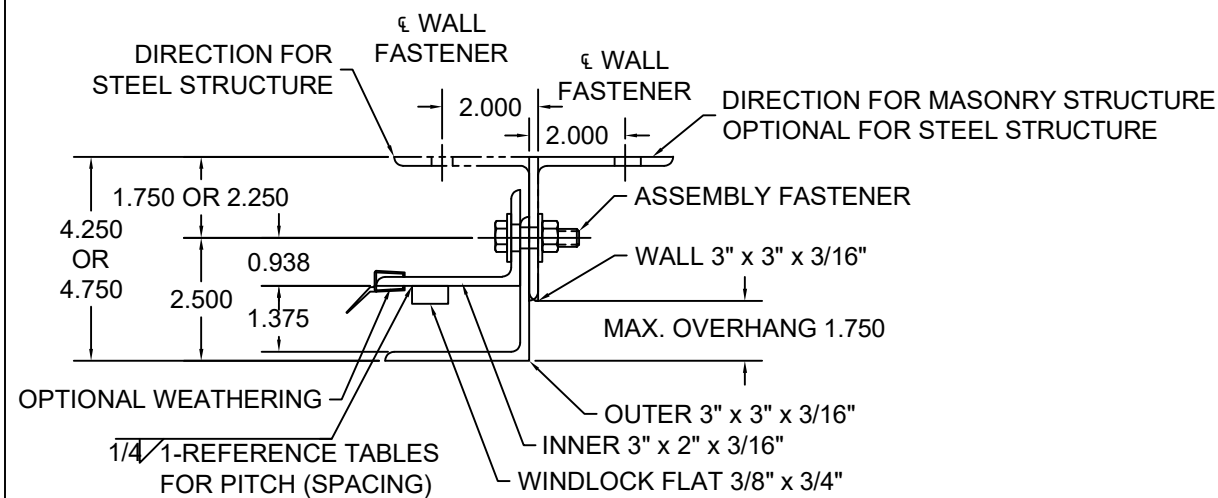


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	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM				
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT IMPACT RATED		DRAWN BY:	SIZE:	SCALE:	SHEET:
		KAD	B	AS NOTED	5/43
		DWG NO: ES-16-134-CIW			

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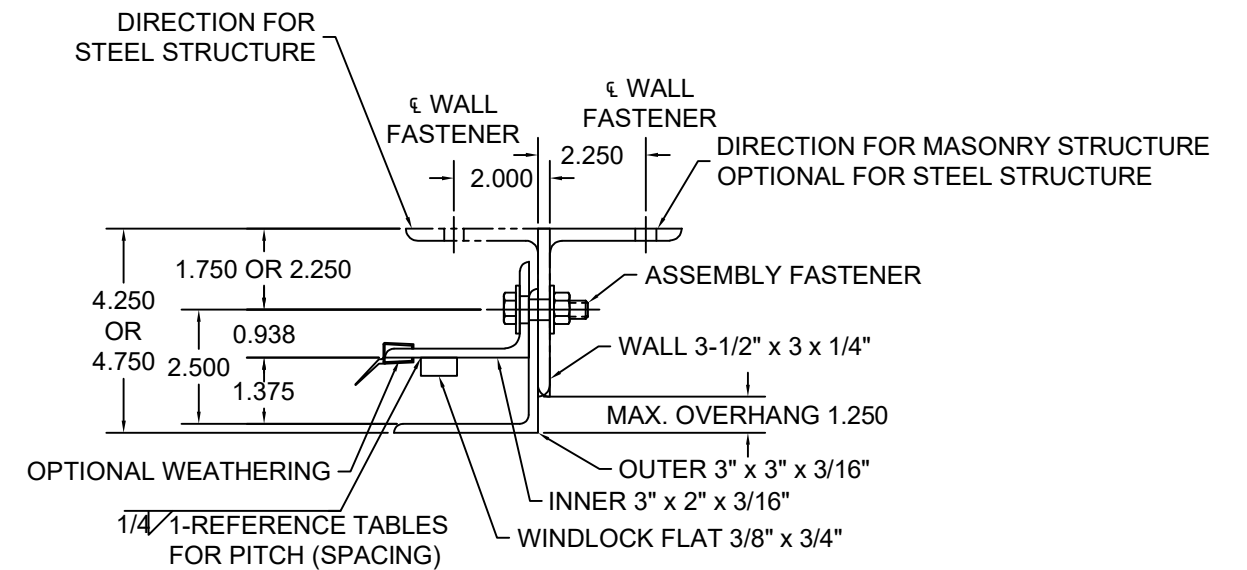


GUIDE ASSEMBLY TYPE 333* (NON-WINDLOCK)
SCALE: 3" = 1'-0"

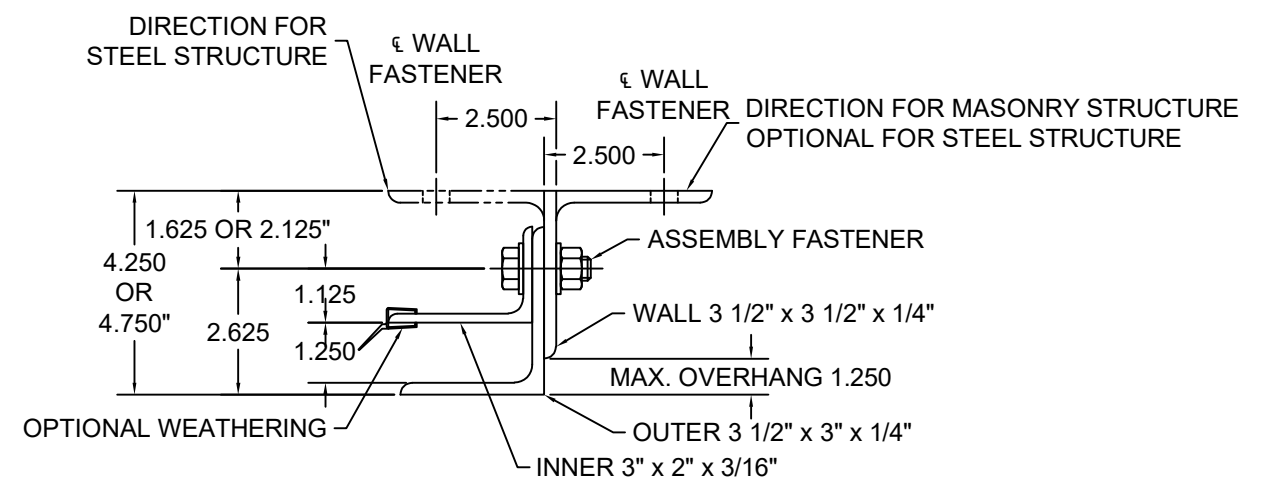


GUIDE ASSEMBLY TYPE 333
SCALE: 3" = 1'-0"

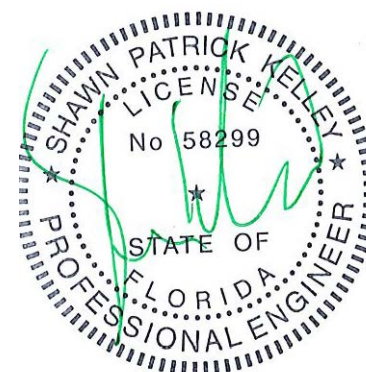
L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398



GUIDE ASSEMBLY TYPE 334
SCALE: 3" = 1'-0"



GUIDE ASSEMBLY TYPE 344* (NON-WINDLOCK)
SCALE: 3" = 1'-0"



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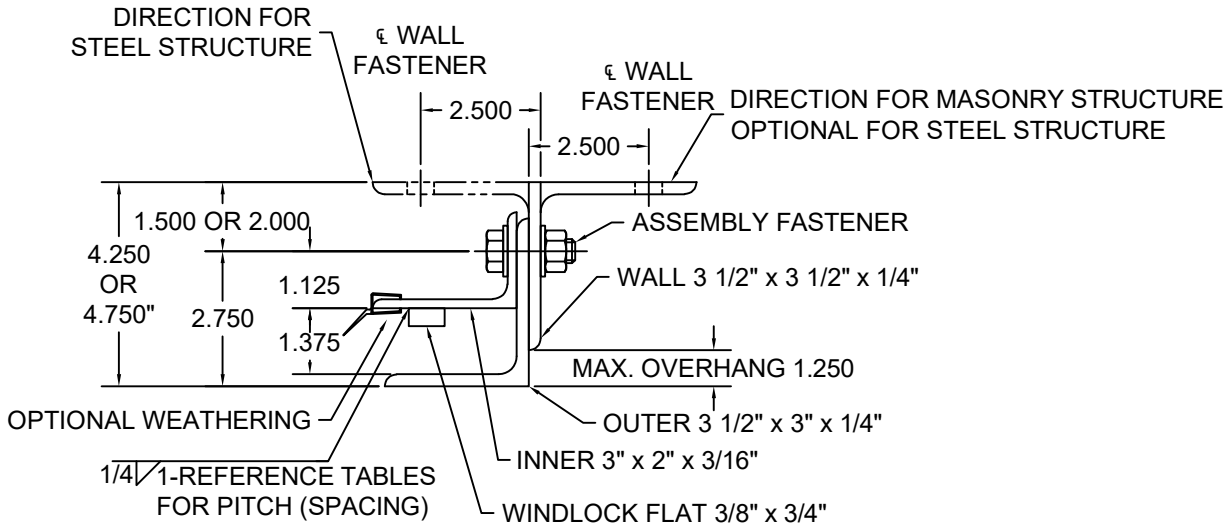
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ANGLES = +/- 1/2 DEG

TITLE: **WIND LOAD CONFIGURATION
NON-INSULATED ROLLING STEEL DOOR
CP0020 SLAT IMPACT RATED**

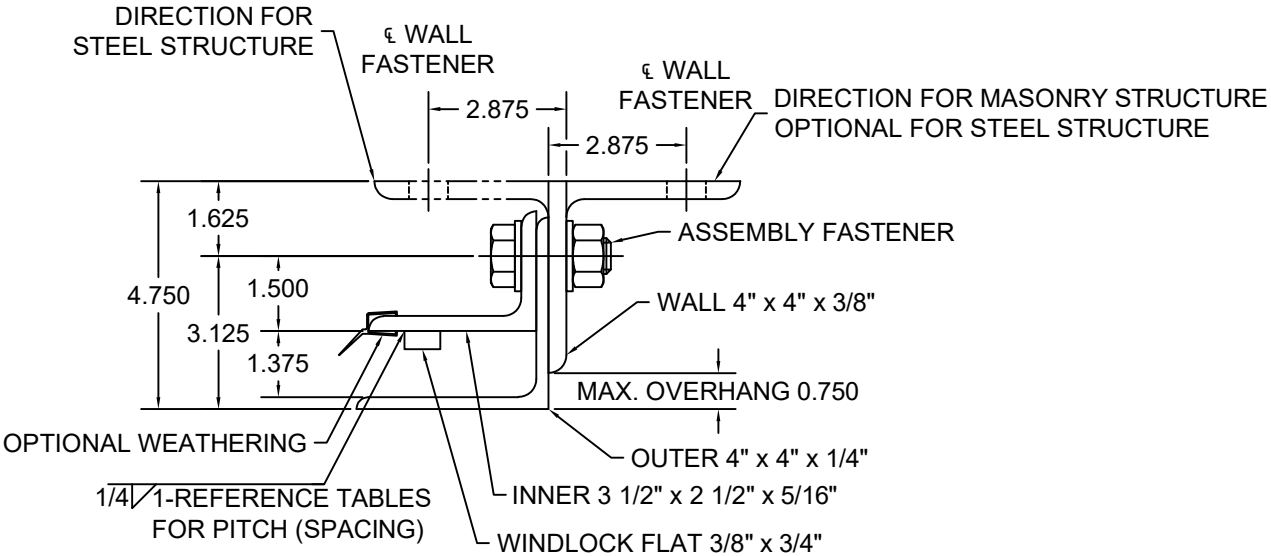
DRAWN BY: **KAD** SIZE: **B** SCALE: **AS NOTED** SHEET: **7/43**
DWG NO: **ES-16-134-CIW**

REVIEWED FOR SPECIFIED DOOR COMPONENTS ONLY, EXISTING STRUCTURE NOT ANALYZED

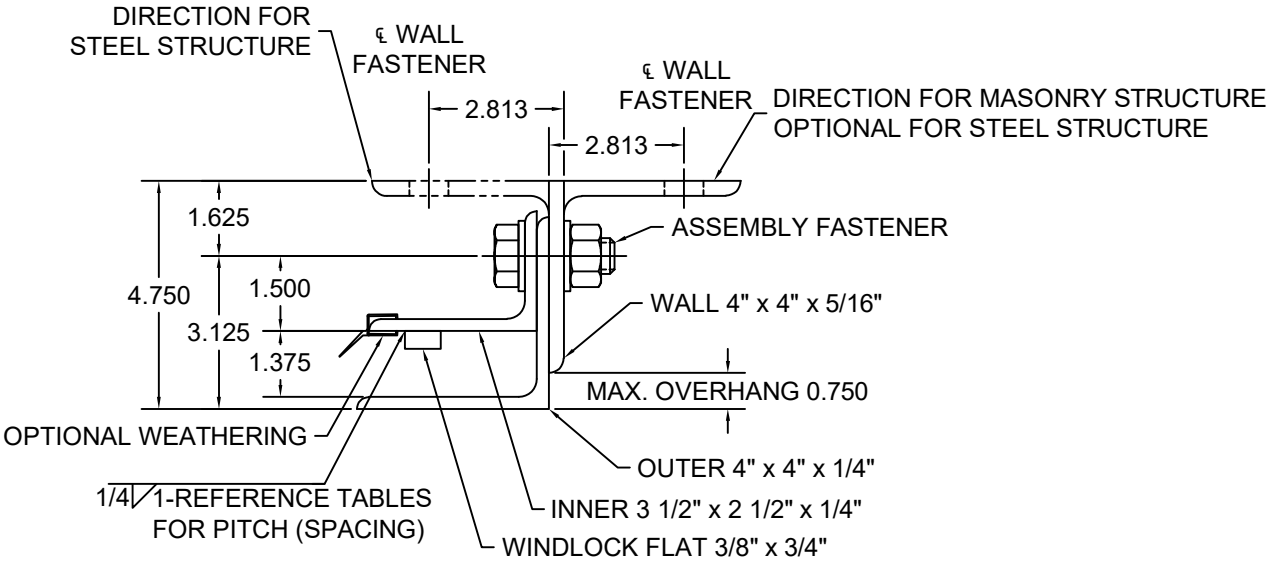
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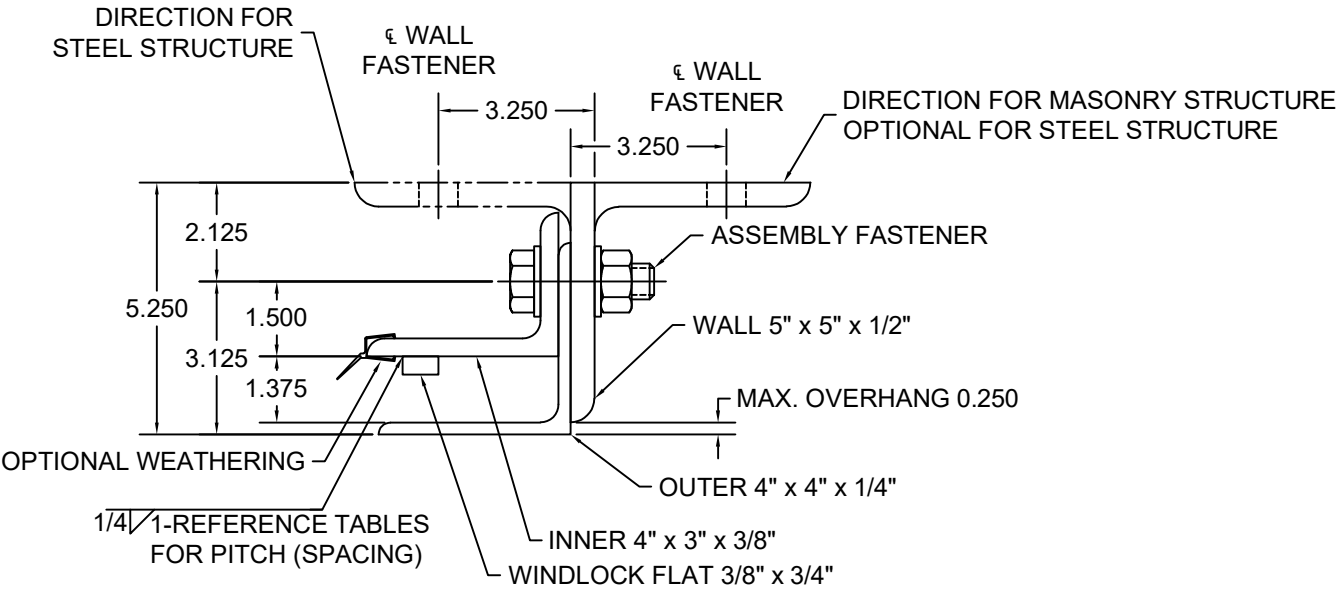
GUIDE ASSEMBLY TYPE 344
SCALE: 3" = 1'-0"



GUIDE ASSEMBLY TYPE 546
SCALE: 3" = 1'-0"



GUIDE ASSEMBLY TYPE 445
SCALE: 3" = 1'-0"



GUIDE ASSEMBLY TYPE 648
SCALE: 3" = 1'-0"



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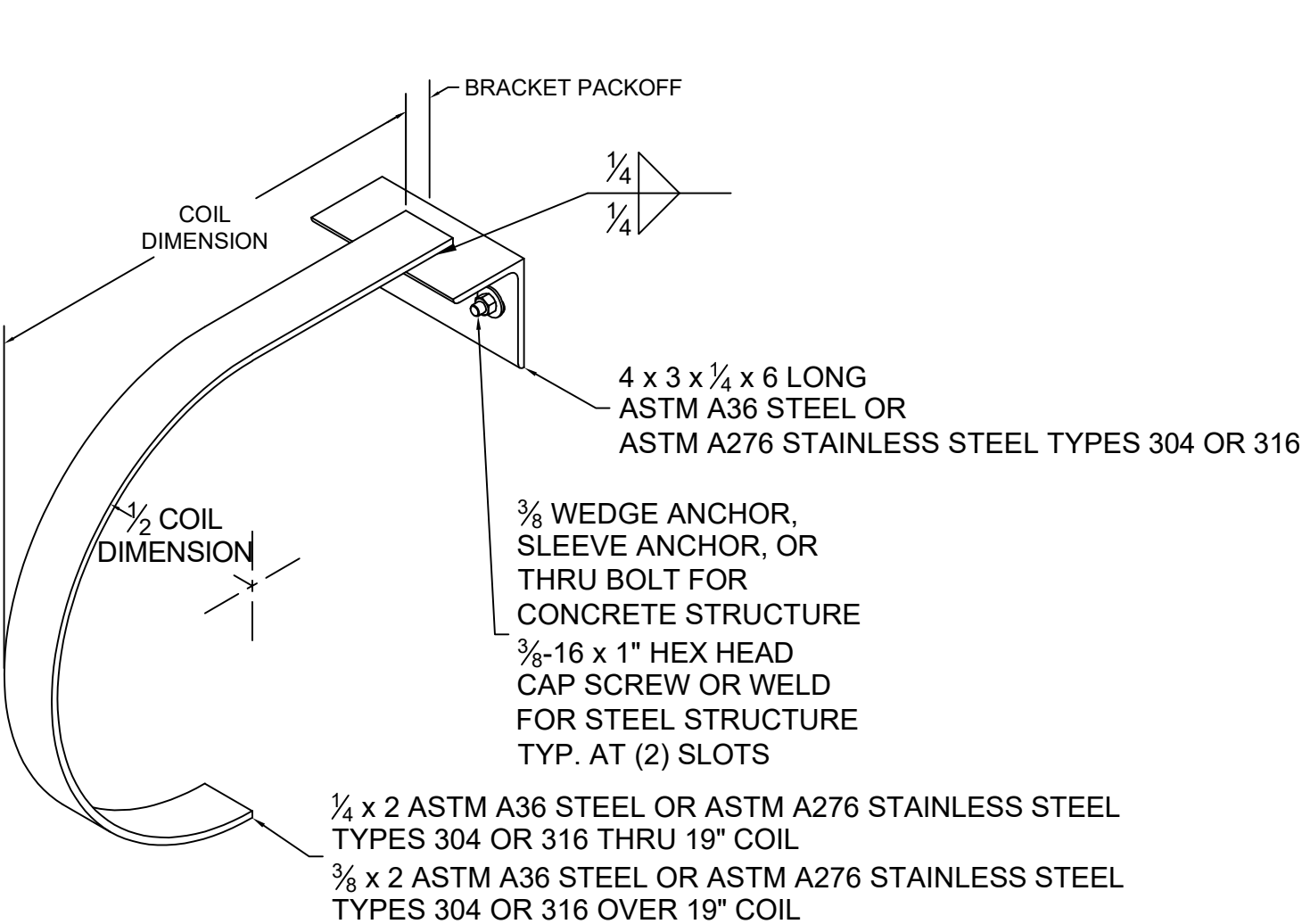
0.000 = +/- 0.031
FRACTIONAL = +/- 1/32
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TITLE: WIND LOAD CONFIGURATION
NON-INSULATED ROLLING STEEL DOOR
CP0020 SLAT IMPACT RATED

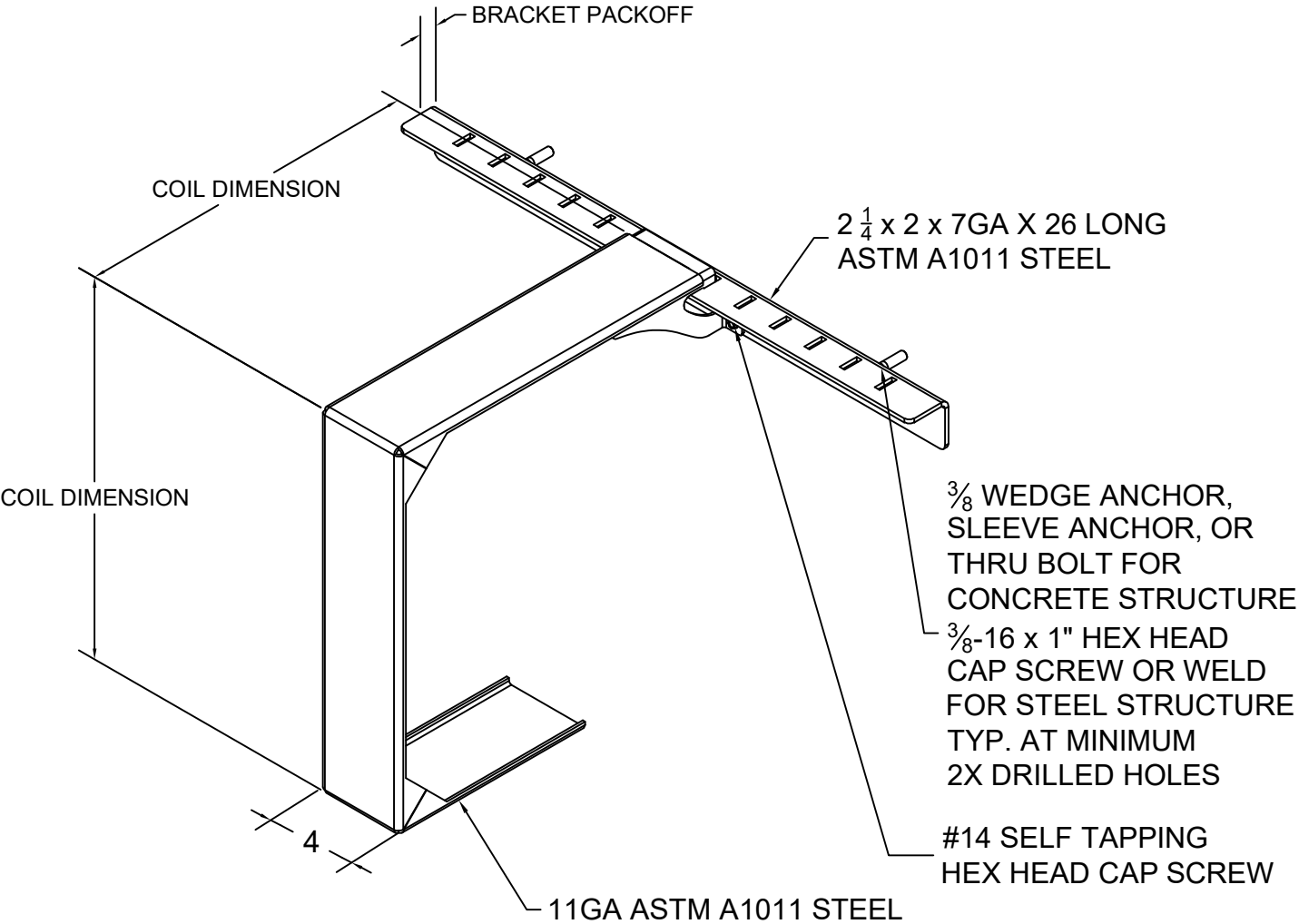
DRAWN BY: KAD
SIZE: B
SCALE: AS NOTED
SHEET: 8/43
DWG NO: ES-16-134-CIW

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MID-HOOD SUPPORT
(WHEN REQUIRED)
"D" SHAPE DEPICTED, SQUARE STYLE ALSO AVAILABLE
SCALE: NTS



MID-HOOD SUPPORT
(WHEN REQUIRED)
SQUARE STYLE DEPICTED, "D" SHAPE ALSO AVAILABLE
SCALE: NTS





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NON-INSULATED ROLLING STEEL DOOR
CP0020 SLAT IMPACT RATED

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DWG NO: ES-16-134-CIW

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CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 20 PSF																																												
Guide Construction								Filled CMU										Steel (Wall anchors are the same diameter as assembly fasteners)																										
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Embed	Max O.C.	Dia.	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	
8'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	15	3/8	1 7/8	17	3/8	2 3/8	9	3/8	2 5/8	27	3/8	3 1/4	15	1/2	3 1/2	27	3/8	3 1/4	15	1/2	3 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	85	0	84	8'-5"
8'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	8	3/8	1 7/8	10	3/8	2 3/8	9	3/8	2 5/8	21	3/8	3 1/4	13	1/2	3 1/2	20	3/8	3 1/4	11	1/2	3 1/2	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	85	0	84	8'-5"
11'-5"	1 1/8	0.344	CP1151	333	12	3/8	18	10	3/8	3	8	3/8	2 3/8	9	3/8	2 5/8	21	3/8	3 1/4	13	1/2	3 1/2	20	3/8	3 1/4	11	1/2	3 1/2	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	17	14	3/16	262	115	247	115	11'-5"
11'-5"	1 1/8	0.344	CP1151	344	12	1/2	18	16	1/2	3 3/4	12	1/2	2 1/2	12	1/2	3 1/2	36	1/2	4 1/4	15	1/2	3 1/2	36	1/2	4 1/4	13	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	29	21	1/4	265	115	247	115	11'-5"
12'-5"	1 1/4	0.469	CP1151	333	12	3/8	18	9	3/8	3	8	1/2	2 1/2	9	1/2	3 1/2	18	3/8	3 1/4	14	5/8	4 1/2	18	3/8	3 1/4	10	5/8	4 1/2	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	31	14	12	3/16	304	125	293	125	12'-5"
12'-5"	1 1/4	0.469	CP1151	344	12	1/2	18	14	1/2	3 3/4	10	1/2	2 1/2	10	1/2	3 1/2	34	1/2	4 1/4	13	1/2	3 1/2	32	1/2	4 1/4	11	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	25	18	1/4	307	125	293	125	12'-5"
13'-5"	1 5/16	0.532	CP1151	333	12	3/8	18	9	1/2	3 3/4	9	5/8	3 3/8	10	5/8	4 3/8	14	3/8	3 1/4	14	3/4	5 1/2	14	3/8	3 1/4	N/A		8	3/8	5 3/16	32	36	7/16" x 5/8"	31	24	11	9	3/16	389	135	379	135	13'-5"	
13'-5"	1 3/8	0.594	CP1151	344	12	1/2	18	13	1/2	3 3/4	9	1/2	2 1/2	9	1/2	3 1/2	30	1/2	4 1/4	15	5/8	4 1/2	29	1/2	4 1/4	11	5/8	4 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	22	16	1/4	353	135	342	135	13'-5"
14'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	9	1/2	3 3/4	8	5/8	3 3/8	10	5/8	4 3/8	14	3/8	3 1/4	13	3/4	5 1/2	13	3/8	3 1/4	N/A		8	3/8	5 3/16	31	36	7/16" x 5/8"	31	24	11	9	3/16	397	144	389	145	14'-5"	
14'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	11	1/2	3 3/4	8	1/2	2 1/2	8	1/2	3 1/2	27	1/2	4 1/4	13	5/8	4 1/2	26	1/2	4 1/4	9	5/8	4 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	19	14	1/4	399	145	389	145	14'-5"
15'-5"	1 1/2	0.719	CP1151	333	12	3/8	17	8	1/2	3 3/4	N/A		8	5/8	4 3/8	10	3/8	3 1/4	N/A		10	3/8	3 1/4	N/A		8	3/8	5 3/16	25	36	7/16" x 5/8"	24	18	9	7	3/16	498	155	491	155	15'-5"			
15'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	9	1/2	3 3/4	8	5/8	3 3/8	10	5/8	4 3/8	22	1/2	4 1/4	13	3/4	5 1/2	20	1/2	4 1/4	N/A		8	1/2	5 3/4	32	36	9/16" x 3/4"	36	34	15	11	1/4	500	155	491	155	15'-5"	
16'-5"	1 1/2	0.719	CP1151	333	12	3/8	15	8	5/8	4 1/2	N/A		8	3/4	5 1/4	8	3/8	3 1/4	N/A		12	1/2	4 1/4	N/A		8	3/8	5 3/16	20	33	7/16" x 5/8"	20	14	7	6	3/16	596	165	589	165	16'-5"			
16'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	8	1/2	3 3/4	N/A		8	5/8	4 3/8	19	1/2	4 1/4	N/A		16	1/2	4 1/4	N/A		8	1/2	5 3/4	27	36	9/16" x 3/4"	36	28	13	9	1/4	597	165	589	165	16'-5"			
17'-5"	1 1/2	0.719	CP1151	334	12	3/8	13	8	5/8	4 1/2	N/A		N/A		13	1/2	4 1/4	N/A		11	1/2	4 1/4	N/A		8	3/8	5 7/16	18	28	7/16" x 5/8"	16	11	6	5	3/16	691	175	684	175	17'-5"				
17'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	9	5/8	4 1/2	N/A		8	3/4	5 1/4	15	1/2	4 1/4	N/A		12	1/2	4 1/4	N/A		8	1/2	5 3/4	23	36	9/16" x 3/4"	32	25	11	8	1/4	692	175	684	175	17'-5"			
18'-5"	1 1/2	0.719	CP1151	334	11	3/8	12	12	3/4	5 1/2	N/A		N/A		11	1/2	4 1/4	N/A		9	1/2	4 1/4	N/A		8	3/8	5 7/16	16	25	7/16" x 5/8"	13	9	5	8	3/16	785	185	778	185	18'-5"				
18'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	13	3/4	5 1/2	N/A		N/A		12	1/2	4 1/4	N/A		10	1/2	4 1/4	N/A		8	1/2	5 3/4	20	33	9/16" x 3/4"	28	22	10	7	1/4	786	185	778	185	18'-5"				
19'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	11	3/4	5 1/2	N/A		N/A		9	1/2	4 1/4	N/A		9	1/2	4 1/4	N/A		8	1/2	5 3/4	17	28	9/16" x 3/4"	24	17	8	6	1/4	928	195	920	196	19'-5"				
20'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	10	3/4	5 1/2	N/A		N/A		9	1/2	4 1/4	N/A		8	1/2	4 1/4	N/A		8	1/2	5 3/4	16	25	9/16" x 3/4"	21	15	7	5	1/4	1024	206	1017	206	20'-5"				
21'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	9	3/4	5 1/2	N/A		N/A		8	1/2	4 1/4	N/A		N/A		N/A		N/A		8	1/2	5 3/4	14	23	9/16" x 3/4"	19	13	7	5	1/4	1121	216	1113	216	21'-5"			
22'-5"	2	1.156	CP1152	445	11	5/8	18	12	3/4	5 1/2	N/A		N/A		10	5/8	5	N/A		N/A		N/A		N/A		8	5/8	6 13/16	27	36	11/16" x 7/8"	36	36	17	12	5/16	888	224	883	225	22'-5"			
23'-5"	2	1.156	CP1152	445	10	5/8	18	11	3/4	5 1/2	N/A		N/A		9	5/8	5	N/A		N/A		N/A		N/A		8	5/8	6 13/16	25	34	11/16" x 7/8"	36	35	16	11	5/16	964	234	959	235	23'-5"			
24'-5"	2	1.156	CP1152	445	10	5/8	18	11	3/4	5 1/2	N/A		N/A		8	5/8	5	N/A		N/A		N/A		N/A		8	5/8	6 13/16	23	31	11/16" x 7/8"	36	32	15	10	5/16	1040	244	1035	245	24'-5"			
25'-5"	2	1.156	CP1152	445	9	5/8	18	10	3/4	5 1/2	N/A		N/A		8	5/8	5	N/A		N/A		N/A		N/A		8	5/8	6 13/16	21	29	11/16" x 7/8"	36	30	14	10	5/16	1117	254	1111	255	25'-5"			
26'-5"	2	1.156	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A		N/A		10	3/4	6 1/4	N/A		N/A		N/A		N/A		8	5/8	6 13/16	20	27	11/16" x 7/8"	36	28	13	9	5/16	1194	265	1189	265	26'-5"			
27'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A		N/A		9	3/4	6 1/4	N/A		N/A		N/A		N/A		8	5/8	6 13/16	19	25	11/16" x 7/8"	34	26	12	8	5/16	1272	275	1267	276	27'-5"			
28'-5"	2	1.156	CP1152	445	8	5/8	18	8	3/4	5 1/2	N/A		N/A		8	3/4	6 1/4	N/A		N/A		N/A		N/A		8	5/8	6 13/16	17	24	11/16" x 7/8"	32	24	11	8	5/16	1351	285	1345	286	28'-5"			
29'-5"	2	1.156	CP1152	445	8	5/8	18	N/A		N/A		N/A		8	3/4	6 1/4	N/A		N/A		N/A		N/A		8	5/8	6 13/16	16	23	11/16" x 7/8"	30	22	11	7	5/16	1431	295	1425	296	29'-5"				
30'-5"	2	1.156	CP1152	445	8	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	16	21	11/16" x 7/8"	29	21	10	7	5/16	1511	306	1505	306	30'-5"					
31'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	15	20	11/16" x 7/8"	27	19	9	7	5/16	1592	316	1587	317	31'-5"					
32'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	14	19	11/16" x 7/8"	26	18	9	6	5/16	1675	326	1669	327	32'-5"					
33'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	13	18	11/16" x 7/8"	24	17	8	6	5/16	1758	336	1752	337	33'-5"					
34'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	12	17	11/16" x 7/8"	21	15	8	5	5/16	1842	347	1836	348	34'-5"					
35'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	12																	

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CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 20 PSF - Continued																																										
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																										
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To	
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			
8'-5"	333*		N/A		36	2 3/8	4	35	2 3/8	3 3/4	36	2 1/2	4	36	2 1/2	4	35	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A		31	1 7/8	3 1/4	35	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	8'-5"
8'-5"	344*		N/A		27	2 3/8	4	26	2 3/8	3 3/4	27	2 1/2	4	36	2 1/2	4	26	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A		23	1 7/8	3 1/4	27	2 1/2	4	36	2 1/2	4	36	2 1/2	4	5 3/4	8'-5"
11'-5"	333		N/A		20	2 3/8	4	21	2 3/8	3 3/4	22	2 1/2	4	27	2 1/2	4	20	2 1/4	4	30	3 1/2	4 3/4	36		36		N/A		15	1 7/8	3 1/4	21	2 1/2	4	29	2 1/2	4	29	2 1/2	4	5 3/16	11'-5"
11'-5"	344	36	3 7/8	6	33	3 5/8	6	31	3 3/4	6	35	3 3/4	5 1/2	36	4 1/4	6 3/4	34	4	6	36	4 1/4	5 1/2	36		36	36	3 7/8	6	27	2 1/2	4	36	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6 1/4	5 3/4	11'-5"
12'-5"	333		N/A		19	2 3/8	4	19	2 3/8	3 3/4	20	2 1/2	4	25	2 1/2	4	18	2 1/4	4	27	3 1/2	4 3/4	36		36		N/A		14	1 7/8	3 1/4	20	2 1/2	4	27	2 1/2	4	27	2 1/2	4	5 3/16	12'-5"
12'-5"	344	34	3 7/8	6	30	3 5/8	6	29	3 3/4	6	33	3 3/4	5 1/2	36	4 1/4	6 3/4	31	4	6	36	4 1/4	5 1/2	36		36	34	3 7/8	6	25	2 1/2	4	33	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6 1/4	5 3/4	12'-5"
13'-5"	333		N/A		16	2 3/8	4	17	2 3/8	3 3/4	18	2 1/2	4	22	2 1/2	4	15	2 1/4	4	22	3 1/2	4 3/4	36		36		N/A		12	1 7/8	3 1/4	18	2 1/2	4	24	2 1/2	4	24	2 1/2	4	5 3/16	13'-5"
13'-5"	344	31	3 7/8	6	28	3 5/8	6	27	3 3/4	6	30	3 3/4	5 1/2	36	4 1/4	6 3/4	29	4	6	36	4 1/4	5 1/2	36		36	31	3 7/8	6	23	2 1/2	4	31	3 3/4	5 1/2	35	4 1/4	6 3/4	36	4	6 1/4	5 3/4	13'-5"
14'-5"	333		N/A		16	2 3/8	4	16	2 3/8	3 3/4	18	2 1/2	4	22	2 1/2	4	14	2 1/4	4	21	3 1/2	4 3/4	36		36		N/A		12	1 7/8	3 1/4	17	2 1/2	4	24	2 1/2	4	24	2 1/2	4	5 3/16	14'-5"
14'-5"	344	29	3 7/8	6	26	3 5/8	6	25	3 3/4	6	28	3 3/4	5 1/2	34	4 1/4	6 3/4	27	4	6	36	4 1/4	5 1/2	36		36	29	3 7/8	6	21	2 1/2	4	29	3 3/4	5 1/2	32	4 1/4	6 3/4	36	4	6 1/4	5 3/4	14'-5"
15'-5"	333		N/A		14	2 3/8	4	14	2 3/8	3 3/4	15	2 1/2	4	19	2 1/2	4	12	2 1/4	4	17	3 1/2	4 3/4	36		30		N/A		8	1 7/8	3 1/4	15	2 1/2	4	21	2 1/2	4	21	2 1/2	4	5 3/16	15'-5"
15'-5"	344	26	3 7/8	6	23	3 5/8	6	22	3 3/4	6	25	3 3/4	5 1/2	30	4 1/4	6 3/4	24	4	6	35	4 1/4	5 1/2	36		36	26	3 7/8	6	19	2 1/2	4	26	3 3/4	5 1/2	28	4 1/4	6 3/4	33	4	6 1/4	5 3/4	15'-5"
16'-5"	333		N/A		11	2 3/8	4	12	2 3/8	3 3/4	14	2 1/2	4	17	2 1/2	4	10	2 1/4	4	15	3 1/2	4 3/4	34		24		N/A		6	1 7/8	3 1/4	14	2 1/2	4	16	2 1/2	4	18	2 1/2	4	5 3/16	16'-5"
16'-5"	344	24	3 7/8	6	21	3 5/8	6	20	3 3/4	6	23	3 3/4	5 1/2	27	4 1/4	6 3/4	22	4	6	29	4 1/4	5 1/2	36		36	24	3 7/8	6	16	2 1/2	4	23	3 3/4	5 1/2	25	4 1/4	6 3/4	30	4	6 1/4	5 3/4	16'-5"
17'-5"	334		N/A		11	2 3/8	4	11	2 3/8	3 3/4	13	2 1/2	4	16	2 1/2	4	9	2 1/4	4	14	3 1/2	4 3/4	31		21		N/A			N/A		13	2 1/2	4	5	2 1/2	4	15	2 1/2	4	5 7/16	17'-5"
17'-5"	344	22	3 7/8	6	19	3 5/8	6	18	3 3/4	6	21	3 3/4	5 1/2	25	4 1/4	6 3/4	20	4	6	25	4 1/4	5 1/2	36		36	22	3 7/8	6	12	2 1/2	4	21	3 3/4	5 1/2	23	4 1/4	6 3/4	28	4	6 1/4	5 3/4	17'-5"
18'-5"	334		N/A		9	2 3/8	4	5	2 3/8	4	12	2 1/2	4	5	2 1/2	4	5	2 1/4	4	12	3 1/2	4 3/4	26		17		N/A			N/A		12	2 1/2	4	5	2 1/2	4	18	3 1/4	5	5 7/16	18'-5"
18'-5"	344	20	3 7/8	6	18	3 5/8	6	16	3 3/4	6	19	3 3/4	5 1/2	23	4 1/4	6 3/4	18	4	6	23	4 1/4	5 1/2	36		36	20	3 7/8	6	9	2 1/2	4	20	3 3/4	5 1/2	20	4 1/4	6 3/4	26	4	6 1/4	5 3/4	18'-5"
19'-5"	344	18	3 7/8	6	13	3 5/8	6	15	3 3/4	6	17	3 3/4	5 1/2	21	4 1/4	6 3/4	15	4	6	19	4 1/4	5 1/2	36		36	17	3 7/8	6		N/A		18	3 3/4	5 1/2	15	4 1/4	6 3/4	23	4	6 1/4	5 3/4	19'-5"
20'-5"	344	17	3 7/8	6	9	3 5/8	6	12	3 3/4	6	9	3 3/4	5 1/2	20	4 1/4	6 3/4	14	4	6	17	4 1/4	5 1/2	36		35	15	3 7/8	6		N/A		17	3 3/4	5 1/2	13	4 1/4	6 3/4	22	4	6 1/4	5 3/4	20'-5"
21'-5"	344	16	3 7/8	6	9	3 5/8	6	10	3 3/4	6	9	3 3/4	5 1/2	19	4 1/4	6 3/4	13	4	6	16	4 1/4	5 1/2	36		30	14	3 7/8	6		N/A		15	3 3/4	5 1/2	11	4 1/4	6 3/4	20	4	6 1/4	5 3/4	21'-5"
22'-5"	445	26	5 1/8	7 7/8	23	4 1/2	6	23	4 5/8	7	24	4 1/2	6	26	5	7		N/A		31	5	6 1/4	36		36	25	5 1/8	7 7/8		N/A		25	4 1/2	6		N/A		30	5 1/2	8 1/2	6 13/16	22'-5"
23'-5"	445	24	5 1/8	7 7/8	22	4 1/2	6	22	4 5/8	7	23	4 1/2	6	25	5	7		N/A		29	5	6 1/4	36		36	24	5 1/8	7 7/8		N/A		24	4 1/2	6		N/A		29	5 1/2	8 1/2	6 13/16	23'-5"
24'-5"	445	23	5 1/8	7 7/8	21	4 1/2	6	21	4 5/8	7	22	4 1/2	6	24	5	7		N/A		27	5	6 1/4	36		36	23	5 1/8	7 7/8		N/A		23	4 1/2	6		N/A		27	5 1/2	8 1/2	6 13/16	24'-5"
25'-5"	445	22	5 1/8	7 7/8	20	4 1/2	6	20	4 5/8	7	21	4 1/2	6	23	5	7		N/A		25	5	6 1/4	36		36	22	5 1/8	7 7/8		N/A		22	4 1/2	6		N/A		26	5 1/2	8 1/2	6 13/16	25'-5"
26'-5"	445	21	5 1/8	7 7/8	19	4 1/2	6	19	4 5/8	7	20	4 1/2	6	22	5	7		N/A		23	5	6 1/4	36		36	21	5 1/8	7 7/8		N/A		21	4 1/2	6		N/A		25	5 1/2	8 1/2	6 13/16	26'-5"
27'-5"	445	21	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	21	5	7		N/A		22	5	6 1/4	36		36	20	5 1/8	7 7/8		N/A		20	4 1/2	6		N/A		24	5 1/2	8 1/2	6 13/16	27'-5"
28'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	17	4 5/8	7	19	4 1/2	6	20	5	7		N/A		21	5	6 1/4	36		36	19	5 1/8	7 7/8		N/A		19	4 1/2	6		N/A		23	5 1/2	8 1/2	6 13/16	28'-5"
29'-5"	445	19	5 1/8	7 7/8	17	4 1/2	6	15	4 5/8	7	18	4 1/2	6	19	5	7		N/A		20	5	6 1/4	36		36	18	5 1/8	7 7/8		N/A		18	4 1/2	6		N/A		21	5 1/2	8 1/2	6 13/16	29'-5"
30'-5"	445	18	5 1/8	7 7/8	15	4 1/2	6	11	4 5/8	7	11	4 1/2	6	19	5	7		N/A		19	5	6 1/4	36		36	18	5 1/8	7 7/8		N/A		11	4 1/2	6		N/A		20	5 1/2	8 1/2	6 13/16	30'-5"
31'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	11	4 5/8	7	11	4 1/2	6	18	5	7		N/A		18	5	6 1/4	36		36	17	5 1/8	7 7/8		N/A		11	4 1/2	6		N/A		19	5 1/2	8 1/2	6 13/16	31'-5"
32'-5"	445	17	5 1/8	7																																						

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Guide Construction										Filled CMU																		Steel (Wall anchors are the same diameter as assembly fasteners)																	
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To	
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)		
6'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	13	3/8	1 7/8	15	3/8	2 3/8	15	3/8	2 5/8	10	3/8	1 5/8	16	3/8	2 3/4	11	3/8	2	14	3/8	2 3/4	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	97	0	96	6'-5"	
6'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	14	3/8	3	8	3/8	2 3/8	8	3/8	2 5/8	24	3/8	3 1/4	13	1/2	3 1/2	23	3/8	3 1/4	13	1/2	3 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	98	0	96	6'-5"	
11'-5"	1 1/8	0.344	CP1151	333	12	3/8	16	8	5/8	4 1/2	N/A	N/A	N/A	8	3/4	5 1/4	14	1/2	4 1/4	N/A	N/A	N/A	11	1/2	4 1/4	N/A	8	3/8	5 3/16	20	32	7/16" x 5/8"	20	32	7/16" x 5/8"	20	14	7	6	3/16	600	172	582	173	11'-5"
11'-5"	1 1/8	0.344	CP1151	344	12	1/2	18	10	5/8	4 1/2	N/A	N/A	N/A	8	5/8	4 3/8	18	1/2	4 1/4	N/A	N/A	N/A	15	1/2	4 1/4	N/A	8	1/2	5 3/4	26	36	9/16" x 3/4"	36	28	13	9	1/4	603	173	582	173	11'-5"			
12'-5"	1 1/4	0.469	CP1151	334	12	3/8	14	8	5/8	4 1/2	N/A	N/A	N/A	8	3/4	5 1/4	8	3/8	3 1/4	N/A	N/A	N/A	12	1/2	4 1/4	N/A	8	3/8	5 7/16	20	31	7/16" x 5/8"	18	13	7	6	3/16	631	187	617	187	12'-5"			
12'-5"	1 1/4	0.469	CP1151	344	12	1/2	18	9	5/8	4 1/2	N/A	N/A	N/A	8	5/8	4 3/8	17	1/2	4 1/4	N/A	N/A	N/A	14	1/2	4 1/4	N/A	8	1/2	5 3/4	25	36	9/16" x 3/4"	34	27	12	9	1/4	634	188	617	187	12'-5"			
13'-5"	1 5/16	0.532	CP1151	334	12	3/8	12	13	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	12	1/2	4 1/4	N/A	N/A	N/A	9	1/2	4 1/4	N/A	8	3/8	5 7/16	17	26	7/16" x 5/8"	15	10	6	5	3/16	733	202	720	203	13'-5"			
13'-5"	1 3/8	0.594	CP1151	344	12	1/2	18	8	5/8	4 1/2	N/A	N/A	N/A	8	3/4	5 1/4	15	1/2	4 1/4	N/A	N/A	N/A	12	1/2	4 1/4	N/A	8	1/2	5 3/4	23	36	9/16" x 3/4"	32	25	11	8	1/4	678	202	664	202	13'-5"			
14'-5"	1 1/2	0.719	CP1151	334	12	3/8	12	13	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	12	1/2	4 1/4	N/A	N/A	N/A	9	1/2	4 1/4	N/A	8	3/8	5 7/16	17	27	7/16" x 5/8"	15	10	6	5	3/16	725	217	715	217	14'-5"			
14'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	8	5/8	4 1/2	N/A	N/A	N/A	8	3/4	5 1/4	13	1/2	4 1/4	N/A	N/A	N/A	11	1/2	4 1/4	N/A	8	1/2	5 3/4	22	35	9/16" x 3/4"	30	23	10	7	1/4	726	217	715	217	14'-5"			
15'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	11	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	9	1/2	4 1/4	N/A	8	1/2	5 3/4	17	28	9/16" x 3/4"	24	18	8	6	1/4	914	233	902	233	15'-5"			
16'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	9	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	N/A	8	1/2	5 3/4	15	25	9/16" x 3/4"	21	14	7	5	1/4	1052	248	1040	248	16'-5"			
17'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	8	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	9	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	8	1/2	5 3/4	13	22	9/16" x 3/4"	17	12	6	N/A	1/4	1189	263	1178	264	17'-5"				
18'-5"	2	1.156	CP1152	445	10	5/8	18	11	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	9	5/8	5	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	25	34	11/16" x 7/8"	36	35	16	11	5/16	955	276	947	277	18'-5"				
19'-5"	2	1.156	CP1152	445	10	5/8	18	10	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	5	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	22	31	11/16" x 7/8"	36	32	14	10	5/16	1062	291	1054	292	19'-5"				
20'-5"	2	1.156	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	10	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	20	28	11/16" x 7/8"	36	29	13	9	5/16	1169	306	1162	307	20'-5"				
21'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	9	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	18	25	11/16" x 7/8"	34	26	12	8	5/16	1277	321	1269	322	21'-5"				
22'-5"	2	1.156	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	17	23	11/16" x 7/8"	31	24	11	8	5/16	1386	337	1378	338	22'-5"				
23'-5"	2	1.156	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	16	22	11/16" x 7/8"	29	21	10	7	5/16	1495	352	1487	353	23'-5"				
24'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	27	19	9	7	5/16	1605	367	1597	368	24'-5"				
25'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	14	19	11/16" x 7/8"	25	17	9	6	5/16	1717	383	1709	384	25'-5"				
26'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	22	17	11/16" x 7/8"	22	15	8	5	5/16	1830	398	1822	399	26'-5"	
27'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	20	16	11/16" x 7/8"	20	14	7	5	5/16	1944	413	1936	415	27'-5"	
28'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	15	11/16" x 7/8"	18	15	11/16" x 7/8"	18	12	7	5	5/16	2060	429	2051	430	28'-5"	
29'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	15	11/16" x 7/8"	17	11	6	N/A	5/16	2177	444	2168	446	29'-5"	
30'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	15	14	11/16" x 7/8"	15	10	6	N/A	5/16	2295	460	2287	461	30'-5"	
31'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	13	11/16" x 7/8"	14	9	6	N/A	5/16	2415	476	2407	477	31'-5"	
32'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	12	11/16" x 7/8"	13	12	11/16" x 7/8"	13	8	5	N/A	5/16	2537	491	2528	492	32'-5"	
33'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	8	12	11/16" x 7/8"	12	12	11/16" x 7/8"	12	8	5	N/A	5/16	2660	507	2651	508	33'-5"	
34'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	15	16	7/8" x 1"	34	15	7/8" x 1"	34	24	12	8	3/8	2313	519	2305	519	34'-5"	
35'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	15	7/8" x 1"	32														

L/TR	REVISION	DATE	BY	E.C.O.
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CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 30 PSF - Continued																																																						
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																																						
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To													
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.															
6'-5"	333*		N/A		34	2 3/8	4		32	2 3/8	3 3/4	34	2 1/2	4		36	2 1/2	4		32	2 1/4	4		36	3 1/2	4 3/4		36		N/A		29	1 7/8	3 1/4		33	2 1/2	4		36	2 1/2	4		4 9/16	6'-5"									
6'-5"	344*		N/A		25	2 3/8	4		24	2 3/8	3 3/4		25	2 1/2	4		33	2 1/2	4		24	2 1/4	4		36	3 1/2	4 3/4		36		N/A		22	1 7/8	3 1/4		25	2 1/2	4		35	2 1/2	4		5 3/4	6'-5"								
11'-5"	333		N/A		11	2 3/8	4		11	2 3/8	3 3/4		14	2 1/2	4		17	2 1/2	4		9	2 1/4	4		14	3 1/2	4 3/4		35		N/A			N/A		13	2 1/2	4		5	2 1/2	4		17	2 1/2	4		5 3/16	11'-5"					
11'-5"	344	23	3 7/8	6		20	3 5/8	6		19	3 3/4	6		22	3 3/4	5 1/2		27	4 1/4	6 3/4		21	4	6		28	4 1/4	5 1/2		36		23	3 7/8	6		15	2 1/2		4		23	3 3/4	5 1/2		24	4 1/4	6 3/4		30	4	6 1/4		5 3/4	11'-5"
12'-5"	334		N/A		11	2 3/8	4		12	2 3/8	3 3/4		14	2 1/2	4		17	2 1/2	4		10	2 1/4	4		15	3 1/2	4 3/4		36		N/A			N/A		6	1 7/8	3 1/4		14	2 1/2	4		17	2 1/2	4		5 7/16	12'-5"					
12'-5"	344	23	3 7/8	6		20	3 5/8	6		19	3 3/4	6		22	3 3/4	5 1/2		26	4 1/4	6 3/4		21	4	6		27	4 1/4	5 1/2		36		23	3 7/8	6		14	2 1/2	4		22	3 3/4	5 1/2		24	4 1/4	6 3/4		29	4	6 1/4		5 3/4	12'-5"	
13'-5"	334		N/A		10	2 3/8	4		5	2 3/8	4		13	2 1/2	4		15	2 1/2	4		5	2 1/4	4		13	3 1/2	4 3/4		29		N/A			N/A			12	2 1/2	4		5	2 1/2	4		18	3 1/4	5		5 7/16	13'-5"				
13'-5"	344	22	3 7/8	6		19	3 5/8	6		18	3 3/4	6		21	3 3/4	5 1/2		25	4 1/4	6 3/4		20	4	6		25	4 1/4	5 1/2		36		22	3 7/8	6		12	2 1/2	4		21	3 3/4	5 1/2		23	4 1/4	6 3/4		28	4	6 1/4		5 3/4	13'-5"	
14'-5"	334		N/A		10	2 3/8	4		5	2 3/8	4		13	2 1/2	4		15	2 1/2	4		5	2 1/4	4		13	3 1/2	4 3/4		28		N/A			N/A			12	2 1/2	4		5	2 1/2	4		18	3 1/4	5		5 7/16	14'-5"				
14'-5"	344	21	3 7/8	6		18	3 5/8	6		17	3 3/4	6		20	3 3/4	5 1/2		24	4 1/4	6 3/4		19	4	6		24	4 1/4	5 1/2		36		21	3 7/8	6		10	2 1/2	4		20	3 3/4	5 1/2		22	4 1/4	6 3/4		26	4	6 1/4		5 3/4	14'-5"	
15'-5"	344	18	3 7/8	6		13	3 5/8	6		14	3 3/4	6		17	3 3/4	5 1/2		21	4 1/4	6 3/4		15	4	6		19	4 1/4	5 1/2		36		17	3 7/8	6			N/A		18	3 3/4	5 1/2		15	4 1/4	6 3/4		23	4	6 1/4		5 3/4	15'-5"		
16'-5"	344	16	3 7/8	6		9	3 5/8	6		11	3 3/4	6		9	3 3/4	5 1/2		19	4 1/4	6 3/4		13	4	6		17	4 1/4	5 1/2		36		15	3 7/8	6			N/A		16	3 3/4	5 1/2		12	4 1/4	6 3/4		21	4	6 1/4		5 3/4	16'-5"		
17'-5"	344	14	3 7/8	6		9	3 5/8	6		9	3 3/4	6		8	3 3/4	5 1/2		18	4 1/4	6 3/4		11	4	6		15	4 1/4	5 1/2		36		12	3 7/8	6			N/A		9	3 3/4	5 1/2		9	4 1/4	6 3/4		7	4	6 1/4		5 3/4	17'-5"		
18'-5"	445	24	5 1/8	7 7/8		22	4 1/2	6		21	4 5/8	7		23	4 1/2	6		25	5	7			N/A			28	5	6 1/4		36		23	5 1/8	7 7/8			N/A		23	4 1/2	6			N/A		28	5 1/2	8 1/2		6 13/16	18'-5"			
19'-5"	445	23	5 1/8	7 7/8		20	4 1/2	6		20	4 5/8	7		21	4 1/2	6		23	5	7			N/A			26	5	6 1/4		36		22	5 1/8	7 7/8			N/A		22	4 1/2	6			N/A		27	5 1/2	8 1/2		6 13/16	19'-5"			
20'-5"	445	21	5 1/8	7 7/8		19	4 1/2	6		19	4 5/8	7		20	4 1/2	6		22	5	7			N/A			23	5	6 1/4		36		21	5 1/8	7 7/8			N/A		21	4 1/2	6			N/A		25	5 1/2	8 1/2		6 13/16	20'-5"			
21'-5"	445	20	5 1/8	7 7/8		18	4 1/2	6		18	4 5/8	7		19	4 1/2	6		21	5	7			N/A			22	5	6 1/4		36		20	5 1/8	7 7/8			N/A		20	4 1/2	6			N/A		23	5 1/2	8 1/2		6 13/16	21'-5"			
22'-5"	445	19	5 1/8	7 7/8		17	4 1/2	6		16	4 5/8	7		18	4 1/2	6		19	5	7			N/A			20	5	6 1/4		36		19	5 1/8	7 7/8			N/A		19	4 1/2	6			N/A		22	5 1/2	8 1/2		6 13/16	22'-5"			
23'-5"	445	18	5 1/8	7 7/8		11	4 1/2	6		11	4 5/8	7		11	4 1/2	6		19	5	7			N/A			18	5	6 1/4		36		18	5 1/8	7 7/8			N/A		11	4 1/2	6			N/A		20	5 1/2	8 1/2		6 13/16	23'-5"			
24'-5"	445	18	5 1/8	7 7/8		11	4 1/2	6		10	4 5/8	7		10	4 1/2	6		17	5	7			N/A			17	5	6 1/4		36		17	5 1/8	7 7/8			N/A		10	4 1/2	6			N/A		19	5 1/2	8 1/2		6 13/16	24'-5"			
25'-5"	445	17	5 1/8	7 7/8		10	4 1/2	6		9	4 5/8	7		9	4 1/2	6		16	5	7			N/A			13	5	6 1/4		36		15	5 1/8	7 7/8			N/A		9	4 1/2	6			N/A		10	5 1/2	8 1/2		6 13/16	25'-5"			
26'-5"	546	15	5 1/8	7 7/8		9	4 1/2	6		9	4 5/8	7		9	4 1/2	6		11	5	7			N/A			12	5	6 1/4		36		11	5 1/8	7 7/8			N/A		8	4 1/2	6			N/A		10	5 1/2	8 1/2		6 7/8	26'-5"			
27'-5"	546	11	5 1/8	7 7/8		8	4 1/2	6		8	4 5/8	7		8	4 1/2	6		10	5	7			N/A			11	5	6 1/4		36		10	5 1/8	7 7/8			N/A		7	4 1/2	6			N/A		10	5 1/2	8 1/2		6 7/8	27'-5"			
28'-5"	546	10	5 1/8	7 7/8		7	4 1/2	6		7	4 5/8	7		7	4 1/2	6		9	5	7			N/A			9	5	6 1/4		36		9	5 1/8	7 7/8			N/A		6	4 1/2	6			N/A		9	5 1/2	8 1/2		6 7/8	28'-5"			
29'-5"	546	9	5 1/8	7 7/8		6	4 1/2	6		6	4 5/8	7		6	4 1/2	6		9	5	7			N/A			7	5	6 1/4		36		8	5 1/8	7 7/8			N/A		5	4 1/2	6			N/A		8	5 1/2	8 1/2		6 7/8	29'-5"			
30'-5"	546	8	5 1/8	7 7/8		5	4 1/2	6			N/A				N/A			8	5	7			N/A			5	5	6 1/4		34		7	5 1/8	7 7/8			N/A			N/A			7	5 1/2	8 1/2		6 7/8	30'-5"						
31'-5"	546	7	5 1/8	7 7/8			N/A				N/A				N/A			7	5	7			N/A				N/A			31			N/A			N/A			N/A			6	5 1/2	8 1/2		6 7/8	31'-5"							
32'-5"	546	7	5 1/8	7 7/8			N/A				N/A				N/A			6	5	7			N/A				N/A			29			N/A			N/A			N/A			5	5 1/2	8 1/2		6 7/8	32'-5"							
33'-5"	546	6	5 1/8	7 7/8			N/A				N/A				N/A			5	5	7			N/A				N/A			27			N/A			N/A			N/A			5	5 1/2	8 1/2		6 7/8	33'-5"							
34'-5"	648	11	5 3/4	8 3/4		7	5 1/2	8			N/A		9	5 1/2	8		11	6 1/4	8 1/8			N/A			12	6 5/8	7 7/8		36		36			N/A		8	5 1/2	8			N/A		10	6 1/4	10		7 1/2	34'-5"						
35'-5"	648	10	5 3/4	8 3/4		6	5 1/2	8			N/A		8	5 1/2	8		10	6 1/4	8 1/8			N/A			10	6 5/8	7 7/8		36		36			N/A		7	5 1/2	8			N/A		10</											

REVIEWED FOR SPECIFIED DOOR COMPONENTS ONLY, EXISTING STRUCTURE NOT ANALYZED

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 40 PSF																																												
Guide Construction								Filled CMU																Steel (Wall anchors are the same diameter as assembly fasteners)																				
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Embed	Max O.C.	Dia.	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	12	3/8	1 7/8	13	3/8	2 3/8	13	3/8	2 5/8	9	3/8	1 5/8	14	3/8	2 3/4	10	3/8	2	13	3/8	2 3/4	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	110	0	108	5'-5"
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	12	3/8	3	9	1/2	2 1/2	9	1/2	3 1/2	21	3/8	3 1/4	12	1/2	3 1/2	21	3/8	3 1/4	11	1/2	3 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	110	0	108	5'-5"
11'-5"	1 3/16	0.344	CP1152	344	10	1/2	18	10	3/4	5 1/2	N/A	N/A	N/A	9	1/2	4 1/4	N/A	8	1/2	4 1/4	N/A	8	1/2	4 1/4	N/A	8	1/2	5 3/4	17	27	9/16" x 3/4"	23	17	8	6	1/4	943	231	919	231	11'-5"			
12'-5"	1 5/16	0.469	CP1152	344	10	1/2	18	10	3/4	5 1/2	N/A	N/A	N/A	9	1/2	4 1/4	N/A	8	1/2	4 1/4	N/A	8	1/2	4 1/4	N/A	8	1/2	5 3/4	16	26	9/16" x 3/4"	23	16	8	6	1/4	962	251	942	251	12'-5"			
13'-5"	1 7/16	0.594	CP1152	344	10	1/2	18	10	3/4	5 1/2	N/A	N/A	N/A	9	1/2	4 1/4	N/A	8	1/2	4 1/4	N/A	8	1/2	4 1/4	N/A	8	1/2	5 3/4	16	25	9/16" x 3/4"	22	15	7	5	1/4	1004	270	987	270	13'-5"			
14'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	8	3/4	5 1/2	N/A	N/A	N/A	9	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	8	1/2	5 3/4	14	23	9/16" x 3/4"	19	13	7	5	1/4	1117	290	1103	291	14'-5"							
15'-5"	1 5/8	0.781	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A	N/A	N/A	10	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	20	28	11/16" x 7/8"	36	29	13	9	5/16	1169	309	1155	310	15'-5"							
16'-5"	1 7/8	1.031	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A	N/A	N/A	10	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	21	29	11/16" x 7/8"	36	30	13	10	5/16	1128	328	1117	329	16'-5"							
17'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A	N/A	N/A	9	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	20	27	11/16" x 7/8"	36	28	13	9	5/16	1189	348	1179	349	17'-5"							
18'-5"	2	1.156	CP1152	445	9	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	18	24	11/16" x 7/8"	33	25	11	8	5/16	1326	368	1316	369	18'-5"							
19'-5"	2	1.156	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	16	22	11/16" x 7/8"	30	22	10	7	5/16	1464	388	1454	390	19'-5"							
20'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	27	19	9	7	5/16	1602	409	1592	410	20'-5"							
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	13	18	11/16" x 7/8"	23	16	8	6	5/16	1742	429	1732	431	21'-5"							
22'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	21	14	7	5	5/16	1883	450	1872	451	22'-5"							
23'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	2026	470	2015	472	23'-5"							
24'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	11	6	N/A	5/16	2170	491	2160	492	24'-5"							
25'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	15	10	6	N/A	5/16	2317	511	2306	513	25'-5"							
26'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2465	532	2454	534	26'-5"							
27'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	8	12	11/16" x 7/8"	13	8	5	N/A	5/16	2615	553	2604	554	27'-5"							
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	15	16	7/8" x 1"	34	25	12	8	3/8	2294	570	2284	571	28'-5"							
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	15	7/8" x 1"	32	23	11	8	3/8	2424	590	2414	591	29'-5"							
30'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	15	7/8" x 1"	30	21	10	7	3/8	2555	611	2545	612	30'-5"							
31'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	14	7/8" x 1"	28	20	10	7	3/8	2688	632	2678	632	31'-5"							
32'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2823	652	2813	653	32'-5"							
33'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	13	7/8" x 1"	25	17	9	6	3/8	2960	673	2950	674	33'-5"							
34'-5"	2 9/16	1.719	CP1152 & CP1153	DC6	5	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	9 1/4	11	12	7/8" x 1"	24	16	9	6	3/8	3039	693	3029	694	34'-5"							

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 40 PSF - Continued																																											
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																											
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.						
5'-5"	333*	N/A			32	2 3/8	4	30	2 3/8	3 3/4	32	2 1/2	4	36	2 1/2	4	30	2 1/4	4	36	3 1/2	4 3/4	36		36	N/A			27	1 7/8	3 1/4	31	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	5'-5"	
5'-5"	344*	N/A			24	2 3/8	4	23	2 3/8	3 3/4	24	2 1/2	4	31	2 1/2	4	23	2 1/4	4	36	3 1/2	4 3/4	36		36	N/A			21	1 7/8	3 1/4	23	2 1/2	4	33	2 1/2	4	33	2 1/2	4	5 3/4	5'-5"	
11'-5"	344	18	3 7/8	6	12	3 5/8	6	13	3 3/4	6	9	3 3/4	5 1/2	21	4 1/4	6 3/4	15	4	6	18	4 1/4	5 1/2	36		36	16	3 7/8	6	N/A		17	3 3/4	5 1/2	14	4 1/4	6 3/4	22	4	6 1/4	5 3/4	11'-5"		
12'-5"	344	18	3 7/8	6	9	3 5/8	6	13	3 3/4	6	9	3 3/4	5 1/2	20	4 1/4	6 3/4	14	4	6	18	4 1/4	5 1/2	36		36	16	3 7/8	6	N/A		17	3 3/4	5 1/2	14	4 1/4	6 3/4	22	4	6 1/4	5 3/4	12'-5"		
13'-5"	344	17	3 7/8	6	9	3 5/8	6	12	3 3/4	6	9	3 3/4	5 1/2	20	4 1/4	6 3/4	14	4	6	17	4 1/4	5 1/2	36		34	15	3 7/8	6	N/A		17	3 3/4	5 1/2	13	4 1/4	6 3/4	22	4	6 1/4	5 3/4	13'-5"		
14'-5"	344	15	3 7/8	6	9	3 5/8	6	9	3 3/4	6	9	3 3/4	5 1/2	18	4 1/4	6 3/4	12	4	6	16	4 1/4	5 1/2	36		29	13	3 7/8	6	N/A		9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	14'-5"		
15'-5"	445	21	5 1/8	7 7/8	19	4 1/2	6	19	4 5/8	7	20	4 1/2	6	22	5	7	N/A		24	5	6 1/4	36		36	21	5 1/8	7 7/8	N/A		21	4 1/2	6	N/A			25	5 1/2	8 1/2	6 13/16	15'-5"			
16'-5"	445	22	5 1/8	7 7/8	20	4 1/2	6	19	4 5/8	7	21	4 1/2	6	22	5	7	N/A		24	5	6 1/4	36		36	21	5 1/8	7 7/8	N/A		21	4 1/2	6	N/A			25	5 1/2	8 1/2	6 13/16	16'-5"			
17'-5"	445	21	5 1/8	7 7/8	19	4 1/2	6	19	4 5/8	7	20	4 1/2	6	21	5	7	N/A		23	5	6 1/4	36		36	20	5 1/8	7 7/8	N/A		20	4 1/2	6	N/A			25	5 1/2	8 1/2	6 13/16	17'-5"			
18'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	17	4 5/8	7	19	4 1/2	6	20	5	7	N/A		20	5	6 1/4	36		36	19	5 1/8	7 7/8	N/A		19	4 1/2	6	N/A			22	5 1/2	8 1/2	6 13/16	18'-5"			
19'-5"	445	18	5 1/8	7 7/8	15	4 1/2	6	11	4 5/8	7	11	4 1/2	6	19	5	7	N/A		19	5	6 1/4	36		36	18	5 1/8	7 7/8	N/A		11	4 1/2	6	N/A			20	5 1/2	8 1/2	6 13/16	19'-5"			
20'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A		17	5	6 1/4	36		36	16	5 1/8	7 7/8	N/A		10	4 1/2	6	N/A			19	5 1/2	8 1/2	6 13/16	20'-5"			
21'-5"	546	17	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7	N/A		13	5	6 1/4	36		34	11	5 1/8	7 7/8	N/A		9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	21'-5"			
22'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A		12	5	6 1/4	36		30	10	5 1/8	7 7/8	N/A		8	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	22'-5"			
23'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A		9	5	6 1/4	36		27	9	5 1/8	7 7/8	N/A		7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	23'-5"			
24'-5"	546	9	5 1/8	7 7/8	6	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A		7	5	6 1/4	36		24	8	5 1/8	7 7/8	N/A		5	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	24'-5"			
25'-5"	546	8	5 1/8	7 7/8	N/A						N/A			7	5	7	N/A		N/A			33		22	7	5 1/8	7 7/8	N/A		N/A			N/A	7	5 1/2	8 1/2	6 7/8	25'-5"					
26'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			6	5	7	N/A		N/A			30		20	N/A			N/A		N/A			N/A	6	5 1/2	8 1/2	6 7/8	26'-5"					
27'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A		N/A			27		18	N/A			N/A		N/A			N/A	N/A			6 7/8	27'-5"					
28'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8	N/A			9	5 1/2	8	11	6 1/4	8 1/8	N/A		12	6 5/8	7 7/8	36		36	11	5 3/4	8 3/4	N/A		8	5 1/2	8	N/A			10	6 1/4	10	7 1/2	28'-5"			
29'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	10	6 1/4	8 1/8	N/A		10	6 5/8	7 7/8	36		36	10	5 3/4	8 3/4	N/A		7	5 1/2	8	N/A			9	6 1/4	10	7 1/2	29'-5"			
30'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8	N/A			7	5 1/2	8	9	6 1/4	8 1/8	N/A		8	6 5/8	7 7/8	36		34	10	5 3/4	8 3/4	N/A		6	5 1/2	8	N/A			9	6 1/4	10	7 1/2	30'-5"			
31'-5"	648	8	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A		6	6 5/8	7 7/8	36		32	9	5 3/4	8 3/4	N/A		5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	31'-5"			
32'-5"	648	7	5 3/4	8 3/4	N/A			N/A			5	5 1/2	8	7	6 1/4	8 1/8	N/A		N/A			36		29	8	5 3/4	8 3/4	N/A		N/A			N/A	7	6 1/4	10	7 1/2	32'-5"					
33'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	8 1/8	N/A		N/A			36		27	7	5 3/4	8 3/4	N/A		N/A			N/A	6	6 1/4	10	7 1/2	33'-5"					
34'-5"	DC6	11	5 3/4	8 3/4	9	5 1/2	8	7	5 5/8	10	10	5 1/2	8	10	6 1/4	8 1/8	N/A		12	6 5/8	7 7/8	36		36	12	5 3/4	8 3/4	N/A	10	4 1/2	6	9	5 1/2	8	N/A			10	6 1/4	10	9 1/4	34'-5"	

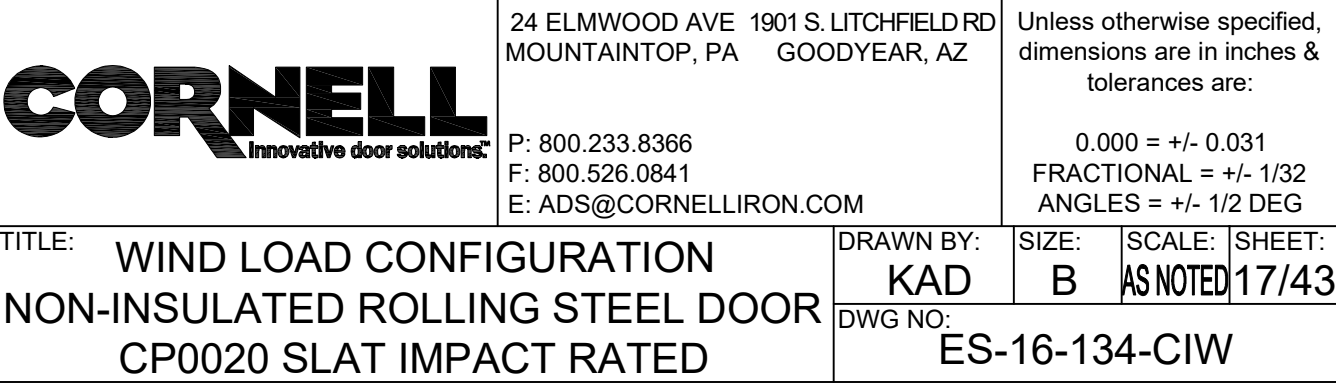
L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

Guide Construction								Filled CMU														Steel (Wall anchors are the same diameter as assembly fasteners)																						
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)	
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	9	3/8	1 7/8	10	3/8	2 3/8	10	3/8	2 5/8	30	3/8	3 1/4	16	1/2	3 1/2	8	3/8	2	16	1/2	3 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	137	0	135	5'-5"
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	10	3/8	3	9	5/8	3 3/8	12	5/8	4 3/8	17	3/8	3 1/4	12	5/8	4 1/2	16	3/8	3 1/4	12	5/8	4 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	138	0	135	5'-5"
11'-5"	1 1/2	0.656	CP1152	DC4	8	1/2	18	5	1/2	3 3/4			N/A			8	1/2	4 1/4				N/A				N/A		8	1/2	7 1/4	11	11	9/16" x 3/4"	11	7	11	7	1/4	1171	374	1147	374	11'-5"	
13'-5"	1 3/8	0.531	CP1152	445	8	5/8	18			N/A			N/A					N/A				N/A				N/A		8	5/8	6 13/16	16	22	11/16" x 7/8"	30	22	11	7	5/16	1431	338	1408	339	13'-5"	
14'-5"	1 1/2	0.656	CP1152	445	8	5/8	18			N/A			N/A					N/A				N/A				N/A		8	5/8	6 13/16	16	22	11/16" x 7/8"	29	22	10	7	5/16	1469	362	1448	364	14'-5"	
15'-5"	1 5/8	0.781	CP1152	445	8	5/8	18			N/A			N/A					N/A				N/A				N/A		8	5/8	6 13/16	15	21	11/16" x 7/8"	28	21	10	7	5/16	1518	387	1501	388	15'-5"	
16'-5"	1 7/8	1.031	CP1152	445	8	5/8	18			N/A			N/A					N/A				N/A				N/A		8	5/8	6 13/16	16	22	11/16" x 7/8"	30	22	10	7	5/16	1460	411	1446	412	16'-5"	
17'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18			N/A			N/A					N/A				N/A				N/A		8	5/8	6 13/16	15	21	11/16" x 7/8"	28	21	10	7	5/16	1530	435	1518	437	17'-5"	
18'-5"	2	1.156	CP1152 & CP1153	546	8	5/8	18			N/A			N/A					N/A				N/A				N/A		8	5/8	6 7/8	13	19	11/16" x 7/8"	24	17	8	6	5/16	1697	461	1685	462	18'-5"	
19'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17			N/A			N/A					N/A				N/A				N/A		8	5/8	6 7/8	12	17	11/16" x 7/8"	21	15	8	5	5/16	1865	486	1853	488	19'-5"	
20'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15			N/A			N/A					N/A				N/A				N/A		8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	2035	512	2022	513	20'-5"	
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	14			N/A			N/A					N/A				N/A				N/A		8	5/8	6 7/8	10	14	11/16" x 7/8"	16	11	6		5/16	2206	537	2194	539	21'-5"	
22'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13			N/A			N/A					N/A				N/A				N/A		8	5/8	6 7/8	9	13	11/16" x 7/8"	15	10	6		5/16	2380	563	2367	565	22'-5"	
23'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12			N/A			N/A					N/A				N/A				N/A		8	5/8	6 7/8	9	12	11/16" x 7/8"	13	8	5		5/16	2556	589	2543	591	23'-5"	
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18			N/A			N/A					N/A				N/A				N/A		8	3/4	7 1/2	15	16	7/8" x 1"	34	25	12	8	3/8	2261	611	2250	612	24'-5"	
25'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17			N/A			N/A					N/A				N/A				N/A		8	3/4	7 1/2	14	15	7/8" x 1"	32	23	11	8	3/8	2414	637	2402	637	25'-5"	
26'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16			N/A			N/A					N/A				N/A				N/A		8	3/4	7 1/2	13	14	7/8" x 1"	30	21	10	7	3/8	2568	662	2556	663	26'-5"	
27'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16			N/A			N/A					N/A				N/A				N/A		8	3/4	7 1/2	12	14	7/8" x 1"	27	19	10	7	3/8	2725	688	2713	689	27'-5"	
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15			N/A			N/A					N/A				N/A				N/A		8	3/4	7 1/2	12	13	7/8" x 1"	25	17	9	6	3/8	2884	714	2872	715	28'-5"	
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	14			N/A			N/A					N/A				N/A				N/A		8	3/4	7 1/2	11	12	7/8" x 1"	24	16	9	6	3/8	3045	740	3032	740	29'-5"	

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 50 PSF - Continued																																											
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																											
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.						
5'-5"	333*	N/A			28	2 3/8	4	27	2 3/8	3 3/4	28	2 1/2	4	36	2 1/2	4	27	2 1/4	4	36	3 1/2	4 3/4	36		36	N/A			25	1 7/8	3 1/4	28	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	5'-5"	
5'-5"	344*	N/A			21	2 3/8	4	20	2 3/8	3 3/4	21	2 1/2	4	28	2 1/2	4	20	2 1/4	4	36	3 1/2	4 3/4	36		36	N/A			18	1 7/8	3 1/4	21	2 1/2	4	29	2 1/2	4	30	2 1/2	4	5 3/4	5'-5"	
11'-5"	DC4	10	3 7/8	6	8	3 5/8	6	9	3 3/4	6	8	3 3/4	5 1/2	17	4 1/4	6 3/4	8	4	6	14	4 1/4	5 1/2	34		15	12	3 7/8	6	N/A		9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	11'-5"		
13'-5"	445	19	5 1/8	7 7/8	17	4 1/2	6	15	4 5/8	7	18	4 1/2	6	19	5	7	N/A			19	5	6 1/4	36		36	18	5 1/8	7 7/8	N/A		18	4 1/2	6	N/A		21	5 1/2	8 1/2	6 13/16	13'-5"			
14'-5"	445	19	5 1/8	7 7/8	16	4 1/2	6	11	4 5/8	7	17	4 1/2	6	19	5	7	N/A			19	5	6 1/4	36		36	18	5 1/8	7 7/8	N/A		11	4 1/2	6	N/A		20	5 1/2	8 1/2	6 13/16	14'-5"			
15'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	11	4 5/8	7	11	4 1/2	6	18	5	7	N/A			18	5	6 1/4	36		36	17	5 1/8	7 7/8	N/A		11	4 1/2	6	N/A		20	5 1/2	8 1/2	6 13/16	15'-5"			
16'-5"	445	18	5 1/8	7 7/8	15	4 1/2	6	11	4 5/8	7	11	4 1/2	6	19	5	7	N/A			19	5	6 1/4	36		36	18	5 1/8	7 7/8	N/A		11	4 1/2	6	N/A		20	5 1/2	8 1/2	6 13/16	16'-5"			
17'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	10	4 5/8	7	11	4 1/2	6	18	5	7	N/A			18	5	6 1/4	36		36	17	5 1/8	7 7/8	N/A		11	4 1/2	6	N/A		19	5 1/2	8 1/2	6 13/16	17'-5"			
18'-5"	546	17	5 1/8	7 7/8	10	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7	N/A			13	5	6 1/4	36		35	15	5 1/8	7 7/8	N/A		9	4 1/2	6	N/A		10	5 1/2	8 1/2	6 7/8	18'-5"			
19'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36		30	10	5 1/8	7 7/8	N/A		8	4 1/2	6	N/A		10	5 1/2	8 1/2	6 7/8	19'-5"			
20'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7	N/A			9	5	6 1/4	36		27	9	5 1/8	7 7/8	N/A		6	4 1/2	6	N/A		9	5 1/2	8 1/2	6 7/8	20'-5"			
21'-5"	546	9	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			6	5	6 1/4	35		23	8	5 1/8	7 7/8	N/A		5	4 1/2	6	N/A		7	5 1/2	8 1/2	6 7/8	21'-5"			
22'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			7	5	7	N/A			N/A			31		21	N/A			N/A			N/A			2	N/A	6	5 1/2	8 1/2	6 7/8	22'-5"		
23'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			28		18	N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	23'-5"				
24'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8	N/A			9	5 1/2	8	11	6 1/4	8 1/8	N/A			12	6 5/8	7 7/8	36		36	11	5 3/4	8 3/4	N/A		8	5 1/2	8	N/A		10	6 1/4	10	7 1/2	24'-5"			
25'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	10	6 1/4	8 1/8	N/A			10	6 5/8	7 7/8	36		36	10	5 3/4	8 3/4	N/A		7	5 1/2	8	N/A		9	6 1/4	10	7 1/2	25'-5"			
26'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8	N/A			7	5 1/2	8	9	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36		33	9	5 3/4	8 3/4	N/A		6	5 1/2	8	N/A		8	6 1/4	10	7 1/2	26'-5"			
27'-5"	648	8	5 3/4	8 3/4	N/A			N/A			5	5 1/2	8	7	6 1/4	8 1/8	N/A			5	6 5/8	7 7/8	36		31	8	5 3/4	8 3/4	N/A		N/A			N/A			7	6 1/4	10	7 1/2	27'-5"		
28'-5"	648	7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	8 1/8	N/A			N/A			36		28	7	5 3/4	8 3/4	N/A		N/A			N/A			6	6 1/4	10	7 1/2	28'-5"		
29'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			5	6 1/4	8 1/8	N/A			N/A			36		26	N/A			N/A			N/A			5	6 1/4	10	7 1/2	29'-5"				

REVIEWED FOR SPECIFIED DOOR COMPONENTS ONLY, EXISTING STRUCTURE NOT ANALYZED

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 60 PSF - Continued																																														
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																														
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To			
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.						
4"-5"	333*	N/A			29	2 3/8	4	28	2 3/8	3 3/4	29	2 1/2	4	36	2 1/2	4	28	2 1/4	4	36	3 1/2	4 3/4	36	N/A			25	1 7/8	3 1/4	28	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4	9 1/16	4'-5"					
4'-5"	344*	N/A			21	2 3/8	4	21	2 3/8	3 3/4	22	2 1/2	4	28	2 1/2	4	21	2 1/4	4	36	3 1/2	4 3/4	36	N/A			19	1 7/8	3 1/4	21	2 1/2	4	29	2 1/2	4	30	2 1/2	4	5 3/4	4'-5"						
11'-5"	DC4	10	3 7/8	6	8	3 5/8	6	9	3 3/4	6	8	3 3/4	5 1/2	17	4 1/4	6 3/4	8	4	6	14	4 1/4	5 1/2	34	15	12	3 7/8	6	N/A	9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	11'-5"							
12'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A	N/A	N/A	17	5	6 1/4	36	36	16	5 1/8	7 7/8	N/A	10	4 1/2	6	N/A	18	5 1/2	8 1/2	6 13/16	12'-5"									
13'-5"	445	16	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	11	5	7	N/A	N/A	N/A	12	5	6 1/4	36	34	11	5 1/8	7 7/8	N/A	9	4 1/2	6	N/A	10	5 1/2	8 1/2	6 13/16	13'-5"									
14'-5"	445	15	5 1/8	7 7/8	9	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A	N/A	N/A	12	5	6 1/4	36	33	11	5 1/8	7 7/8	N/A	8	4 1/2	6	N/A	10	5 1/2	8 1/2	6 13/16	14'-5"									
15'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A	N/A	N/A	12	5	6 1/4	36	31	10	5 1/8	7 7/8	N/A	8	4 1/2	6	N/A	10	5 1/2	8 1/2	6 7/8	15'-5"									
16'-5"	546	15	5 1/8	7 7/8	9	4 1/2	6	8	4 5/8	7	9	4 1/2	6	11	5	7	N/A	N/A	N/A	12	5	6 1/4	36	32	11	5 1/8	7 7/8	N/A	8	4 1/2	6	N/A	10	5 1/2	8 1/2	6 7/8	16'-5"									
17'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A	N/A	N/A	11	5	6 1/4	36	30	10	5 1/8	7 7/8	N/A	8	4 1/2	6	N/A	10	5 1/2	8 1/2	6 7/8	17'-5"									
18'-5"	546	10	5 1/8	7 7/8	6	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7	N/A	N/A	N/A	8	5	6 1/4	36	26	9	5 1/8	7 7/8	N/A	6	4 1/2	6	N/A	8	5 1/2	8 1/2	6 7/8	18'-5"									
19'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6	N/A	N/A	N/A	N/A	N/A	N/A	8	5	7	N/A	N/A	N/A	N/A	N/A	N/A	33	22	7	5 1/8	7 7/8	N/A	N/A	N/A	N/A	N/A	7	5 1/2	8 1/2	6 7/8	19'-5"									
20'-5"	546	7	5 1/8	7 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6	5	7	N/A	N/A	N/A	N/A	N/A	N/A	29	19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	5 1/2	8 1/2	6 7/8	20'-5"									
21'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8	N/A	N/A	N/A	9	5 1/2	8	11	6 1/4	8 1/8	N/A	N/A	N/A	12	6 5/8	7 7/8	36	36	12	5 3/4	8 3/4	N/A	8	5 1/2	8	N/A	11	6 1/4	10	7 1/2	21'-5"									
22'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A	N/A	N/A	8	5 1/2	8	10	6 1/4	8 1/8	N/A	N/A	N/A	10	6 5/8	7 7/8	36	36	11	5 3/4	8 3/4	N/A	7	5 1/2	8	N/A	9	6 1/4	10	7 1/2	22'-5"									
23'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8	N/A	N/A	N/A	7	5 1/2	8	8	6 1/4	8 1/8	N/A	N/A	N/A	7	6 5/8	7 7/8	36	33	9	5 3/4	8 3/4	N/A	6	5 1/2	8	N/A	8	6 1/4	10	7 1/2	23'-5"									
24'-5"	648	8	5 3/4	8 3/4	N/A	N/A	N/A	N/A	N/A	N/A	5	5 1/2	8	7	6 1/4	8 1/8	N/A	N/A	N/A	N/A	N/A	N/A	36	30	8	5 3/4	8 3/4	N/A	N/A	N/A	N/A	N/A	7	6 1/4	10	7 1/2	24'-5"									
25'-5"	648	7	5 3/4	8 3/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6	6 1/4	8 1/8	N/A	N/A	N/A	N/A	N/A	N/A	36	27	7	5 3/4	8 3/4	N/A	N/A	N/A	N/A	N/A	6	6 1/4	10	7 1/2	25'-5"									
26'-5"	DC6	11	5 3/4	8 3/4	9	5 1/2	8	N/A	N/A	N/A	10	5 1/2	8	10	6 1/4	8 1/8	N/A	N/A	N/A	12	6 5/8	7 7/8	36	36	11	5 3/4	8 3/4	10	4 1/2	6	9	5 1/2	8	N/A	10	6 1/4	10	9 1/4	26'-5"							



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CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 65 PSF																																												
Guide Construction								Filled CMU														Steel (Wall anchors are the same diameter as assembly fasteners)																						
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Embed	Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	9	3/8	1 7/8	10	3/8	2 3/8	10	3/8	2 5/8	28	3/8	3 1/4	15	1/2	3 1/2	28	3/8	3 1/4	15	1/2	3 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	3/16	0	146	0	144	4'-5"		
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	9	3/8	3	9	5/8	3 3/8	11	5/8	4 3/8	16	3/8	3 1/4	12	5/8	4 1/2	15	3/8	3 1/4	12	5/8	4 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	3/16	0	146	0	144	4'-5"		
11'-5"	1 1/2	0.656	CP1152	DC4	8	1/2	18	5	1/2	3 3/4	N/A	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	8	1/2	7 1/4	11	11	9/16" x 3/4"	11	7	1/4	1171	374	1147	374	11'-5"				
12'-5"	1 5/16	0.469	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	13	18	11/16" x 7/8"	23	16	8	5/16	1791	408	1759	409	12'-5"					
13'-5"	1 3/8	0.531	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	20	13	7	5/16	1952	440	1922	442	13'-5"						
14'-5"	1 1/2	0.656	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5/16	1987	472	1962	474	14'-5"						
15'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	18	13	7	5/16	2042	504	2019	506	15'-5"						
16'-5"	1 7/8	1.031	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	20	13	7	5/16	1957	535	1940	537	16'-5"						
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	18	13	7	5/16	2042	567	2027	569	17'-5"						
18'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	16	11	6	N/A	5/16	2253	600	2238	602	18'-5"					
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2467	633	2451	635	19'-5"					
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	7	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	15	17	7/8" x 1"	35	26	12	9	3/8	2211	663	2196	664	20'-5"					
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	15	7/8" x 1"	32	23	11	8	3/8	2396	696	2381	697	21'-5"					
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	14	7/8" x 1"	29	21	10	7	3/8	2583	729	2568	730	22'-5"					
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	27	19	9	7	3/8	2773	763	2758	763	23'-5"					
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	12	7/8" x 1"	24	17	9	6	3/8	2966	796	2951	797	24'-5"					

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 65 PSF - Continued																																									
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																									
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.		
4'-5"	333*	N/A			27	2 3/8	4	26	2 3/8	3 3/4	28	2 1/2	4	36	2 1/2	4	26	2 1/4	4	36	3 1/2	4 3/4	36	36	N/A			24	1 7/8	3 1/4	27	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	4'-5"
4'-5"	344*	N/A			21	2 3/8	4	20	2 3/8	3 3/4	21	2 1/2	4	27	2 1/2	4	19	2 1/4	4	34	3 1/2	4 3/4	36	35	N/A			18	1 7/8	3 1/4	20	2 1/2	4	28	2 1/2	4	29	2 1/2	4	5 3/4	4'-5"
11'-5"	DC4	10	3 7/8	6	8	3 5/8	6	9	3 3/4	6	8	3 3/4	5 1/2	17	4 1/4	6 3/4	8	4	6	14	4 1/4	5 1/2	34	15	12	3 7/8	6	N/A			9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	11'-5"
12'-5"	445	15	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36	34	11	5 1/8	7 7/8	N/A			8	4 1/2	6	N/A			10	5 1/2	8 1/2	6 13/16	12'-5"
13'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			11	5	6 1/4	36	30	10	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	13'-5"
14'-5"	546	11	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			10	5	6 1/4	36	29	10	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	14'-5"
15'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	6	4 5/8	7	7	4 1/2	6	9	5	7	N/A			9	5	6 1/4	36	27	9	5 1/8	7 7/8	N/A			6	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	15'-5"
16'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			10	5	6 1/4	36	28	9	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	16'-5"
17'-5"	546	10	5 1/8	7 7/8	6	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7	N/A			8	5	6 1/4	36	26	9	5 1/8	7 7/8	N/A			6	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	17'-5"
18'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6	N/A			N/A			8	5	7	N/A			5	5	6 1/4	33	22	7	5 1/8	7 7/8	N/A			N/A			N/A			7	5 1/2	8 1/2	6 7/8	18'-5"
19'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			6	5	7	N/A			N/A			29	19	N/A			N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	19'-5"
20'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8	N/A			9	5 1/2	8	11	6 1/4	8 1/8	N/A			12	6 5/8	7 7/8	36	36	12	5 3/4	8 3/4	N/A			8	5 1/2	8	N/A			11	6 1/4	10	7 1/2	20'-5"
21'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	9	6 1/4	8 1/8	N/A			9	6 5/8	7 7/8	36	36	10	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			9	6 1/4	10	7 1/2	21'-5"
22'-5"	648	9	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36	32	9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	22'-5"
23'-5"	648	7	5 3/4	8 3/4	N/A			N/A			5	5 1/2	8	7	6 1/4	8 1/8	N/A			N/A			36	29	8	5 3/4	8 3/4	N/A			N/A			N/A			7	6 1/4	10	7 1/2	23'-5"
24'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	8 1/8	N/A			N/A			36	27	7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	10	7 1/2	24'-5"

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CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 70 PSF																																													
Guide Construction								Filled CMU																	Steel (Wall anchors are the same diameter as assembly fasteners)																				
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt TZ2 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To	
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)		
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	8	3/8	1 7/8	9	3/8	2 3/8	9	3/8	2 5/8	26	3/8	3 1/4	14	1/2	3 1/2	26	3/8	3 1/4	14	3/8	3 1/4	9	3/4	5 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	3/16	0	157	0	155	4'-5"
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	8	3/8	3	8	5/8	3 3/8	10	5/8	4 3/8	15	3/8	3 1/4	14	3/4	5 1/2	14	3/8	3 1/4	9	3/4	5 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	3/16	0	158	0	155	4'-5"			
11'-5"	1 3/16	0.344	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	1972	405	1932	407	11'-5"			
12'-5"	1 5/16	0.469	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	20	13	7	5	5/16	1956	439	1922	441	12'-5"			
13'-5"	1 3/8	0.531	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	12	7	5	5/16	2125	475	2094	477	13'-5"			
14'-5"	1 1/2	0.656	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	11	6	5	5/16	2160	509	2133	511	14'-5"			
15'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	16	11	6	N/A	5/16	2216	543	2192	545	15'-5"			
16'-5"	1 7/8	1.031	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	12	7	5	5/16	2123	576	2105	578	16'-5"			
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	16	11	6	N/A	5/16	2213	610	2196	613	17'-5"			
18'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2439	646	2422	649	18'-5"			
19'-5"	2 1/2	1.656	CP1152 & CP1153	648	7	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	15	17	7/8" x 1"	35	26	12	9	3/8	2195	679	2180	679	19'-5"			
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	15	7/8" x 1"	32	23	11	8	3/8	2390	714	2375	715	20'-5"			
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	14	7/8" x 1"	29	20	10	7	3/8	2589	750	2573	751	21'-5"			
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2790	786	2774	787	22'-5"			
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	12	7/8" x 1"	24	16	9	6	3/8	2994	822	2978	823	23'-5"			

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 70 PSF - Continued																																															
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																															
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To				
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.										
4'-5"	333*	N/A			26	2 3/8	4	25	2 3/8	3 3/4	27	2 1/2	4	35	2 1/2	4	25	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A			23	1 7/8	3 1/4	26	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	4'-5"				
4'-5"	344*	N/A			20	2 3/8	4	19	2 3/8	3 3/4	20	2 1/2	4	26	2 1/2	4	18	2 1/4	4	31	3 1/2	4 3/4	36		33		N/A			17	1 7/8	3 1/4	20	2 1/2	4	27	2 1/2	4	28	2 1/2	4	5 3/4	4'-5"				
11'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			10	5	6 1/4	36		31		10	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	11'-5"				
12'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			11	5	6 1/4	36		30		10	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	12'-5"				
13'-5"	546	10	5 1/8	7 7/8	6	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7	N/A			8	5	6 1/4	36		27		9	5 1/8	7 7/8	N/A			6	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	13'-5"				
14'-5"	546	9	5 1/8	7 7/8	6	4 1/2	6	5	4 5/8	7	6	4 1/2	6	9	5	7	N/A			7	5	6 1/4	36		25		8	5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	14'-5"				
15'-5"	546	9	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			6	5	6 1/4	36		24		8	5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			7	5 1/2	8 1/2	6 7/8	15'-5"				
16'-5"	546	9	5 1/8	7 7/8	6	4 1/2	6	5	4 5/8	7	5	4 1/2	6	9	5	7	N/A			7	5	6 1/4	36		25		8	5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	16'-5"				
17'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6	N/A			5	4 1/2	6	8	5	7	N/A			5	5	6 1/4	34		23		7	5 1/8	7 7/8	N/A			5	3 3/4	5 1/2	N/A			7	5 1/2	8 1/2	6 7/8	17'-5"				
18'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			6	5	7	N/A			N/A			30		19		N/A			N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	18'-5"				
19'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8	N/A			9	5 1/2	8	11	6 1/4	8 1/8	N/A			N/A			12		6 5/8	7 7/8	36		36		12	5 3/4	8 3/4	N/A			8	5 1/2	8	N/A			11	6 1/4	10	7 1/2	19'-5"
20'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	9	6 1/4	8 1/8	N/A			N/A			9		6 5/8	7 7/8	36		36		10	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			9	6 1/4	10	7 1/2	20'-5"
21'-5"	648	9	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			N/A			6		6 5/8	7 7/8	36		32		9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	21'-5"
22'-5"	648	7	5 3/4	8 3/4	N/A			N/A			5	5 1/2	8	7	6 1/4	8 1/8	N/A			N/A			36		29		8	5 3/4	8 3/4	N/A			N/A			N/A			7	6 1/4	10	7 1/2	22'-5"				
23'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			5	6 1/4	8 1/8	N/A			N/A			36		26		N/A			N/A			N/A			N/A			5	6 1/4	10	7 1/2	23'-5"				

L'TR	REVISION	DATE	BY	E.C.O.
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Guide Construction								Filled CMU																								Steel (Wall anchors are the same diameter as assembly fasteners)												Superimposed Loads				D.B.G. Up To
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud- SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Vx (+)	Vy (+)	Vx (-)	Vy (-)					
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness									
9'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	13	3/8	1 7/8	15	3/8	2 3/8	15	3/8	2 5/8	10	3/8	1 5/8	16	3/8	2 3/4	11	3/8	2	15	3/8	2 3/4	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	95	0	94	9'-5"				
9'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	14	3/8	3	8	3/8	2 3/8	8	3/8	2 5/8	24	3/8	3 1/4	13	1/2	3 1/2	24	3/8	3 1/4	13	1/2	3 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	95	0	94	9'-5"				
10'-5"	1 1/16	0.282	CP1151	333	12	3/8	18	15	3/8	1 7/8	13	3/8	2 3/8	12	3/8	2 5/8	12	3/8	1 5/8	14	3/8	2 3/4	13	3/8	2	12	3/8	2 3/4	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	61	105	42	104	10'-5"				
10'-5"	1 1/16	0.282	CP1151	344	12	1/2	18	29	1/2	3 3/4	14	1/2	2 1/2	14	1/2	3 1/2	36	1/2	4 1/4	18	1/2	3 1/2	36	1/2	4 1/4	17	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	36	36	1/4	65	105	42	104	10'-5"				
11'-5"	1 1/8	0.344	CP1151	333	12	3/8	18	8	3/8	1 7/8	12	3/8	2 3/8	12	3/8	2 5/8	26	3/8	3 1/4	12	3/8	2 3/4	26	3/8	3 1/4	10	3/8	2 3/4	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	24	20	3/16	184	115	168	114	11'-5"				
11'-5"	1 1/8	0.344	CP1151	344	12	1/2	18	20	1/2	3 3/4	16	1/2	2 1/2	17	1/2	3 1/2	36	1/2	4 1/4	21	1/2	3 1/2	36	1/2	4 1/4	18	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	29	1/4	187	115	168	114	11'-5"					
12'-5"	1 1/4	0.469	CP1151	333	12	3/8	18	11	3/8	3	9	3/8	2 3/8	9	3/8	2 5/8	22	3/8	3 1/4	13	1/2	3 1/2	22	3/8	3 1/4	12	1/2	3 1/2	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	19	15	3/16	239	125	226	125	12'-5"				
12'-5"	1 1/4	0.469	CP1151	344	12	1/2	18	17	1/2	3 3/4	13	1/2	2 1/2	13	1/2	3 1/2	36	1/2	4 1/4	16	1/2	3 1/2	36	1/2	4 1/4	14	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	32	23	1/4	241	125	226	125	12'-5"				
13'-5"	1 3/8	0.594	CP1151	333	12	3/8	18	9	3/8	3	8	1/2	2 1/2	9	1/2	3 1/2	19	3/8	3 1/4	14	5/8	4 1/2	18	3/8	3 1/4	10	5/8	4 1/2	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	32	15	12	3/16	295	135	285	135	13'-5"				
13'-5"	1 3/8	0.594	CP1151	344	12	1/2	18	14	1/2	3 3/4	10	1/2	2 1/2	10	1/2	3 1/2	34	1/2	4 1/4	13	1/2	3 1/2	33	1/2	4 1/4	11	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	26	18	1/4	297	135	285	135	13'-5"				
14'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	8	3/8	3	9	5/8	3 3/8	11	5/8	4 3/8	16	3/8	3 1/4	12	5/8	4 1/2	15	3/8	3 1/4	9	5/8	4 1/2	8	3/8	5 3/16	35	36	7/16" x 5/8"	35	27	13	10	3/16	349	144	341	144	14'-5"				
14'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	12	1/2	3 3/4	9	1/2	2 1/2	9	1/2	3 1/2	30	1/2	4 1/4	15	5/8	4 1/2	28	1/2	4 1/4	11	5/8	4 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	22	16	1/4	351	145	341	144	14'-5"				
15'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	8	1/2	3 3/4	N/A	N/A	N/A	9	5/8	4 3/8	11	3/8	3 1/4	N/A	N/A	N/A	11	3/8	3 1/4	N/A	N/A	N/A	8	3/8	5 3/16	27	36	7/16" x 5/8"	27	20	9	8	3/16	456	154	448	155	15'-5"				
15'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	10	1/2	3 3/4	9	5/8	3 3/8	10	5/8	4 3/8	24	1/2	4 1/4	15	3/4	5 1/2	22	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	35	36	9/16" x 3/4"	36	36	17	12	1/4	457	155	448	155	15'-5"				
16'-5"	1 1/2	0.719	CP1151	333	12	3/8	16	9	5/8	4 1/2	N/A	N/A	N/A	8	3/4	5 1/4	9	3/8	3 1/4	N/A	N/A	N/A	13	1/2	4 1/4	N/A	N/A	N/A	8	3/8	5 3/16	22	35	7/16" x 5/8"	22	15	8	6	3/16	558	165	551	165	16'-5"				
16'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	8	1/2	3 3/4	N/A	N/A	N/A	9	5/8	4 3/8	20	1/2	4 1/4	12	3/4	5 1/2	17	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	28	36	9/16" x 3/4"	36	30	14	10	1/4	560	165	551	165	16'-5"				
17'-5"	1 1/2	0.719	CP1151	334	12	3/8	14	8	5/8	4 1/2	N/A	N/A	N/A	8	3/4	5 1/4	14	1/2	4 1/4	N/A	N/A	N/A	12	1/2	4 1/4	N/A	N/A	N/A	8	3/8	5 7/16	19	30	7/16" x 5/8"	17	12	6	5	3/16	658	175	651	175	17'-5"				
17'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	9	5/8	4 1/2	N/A	N/A	N/A	8	3/4	5 1/4	16	1/2	4 1/4	N/A	N/A	N/A	13	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	24	36	9/16" x 3/4"	33	26	12	8	1/4	659	175	651	175	17'-5"				
18'-5"	1 1/2	0.719	CP1151	334	12	3/8	12	12	3/4	5 1/2	N/A	N/A	N/A	N/A	11	1/2	4 1/4	N/A	N/A	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	8	3/8	5 7/16	17	26	7/16" x 5/8"	14	9	6	5	3/16	755	185	748	185	18'-5"				
18'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	8	5/8	4 1/2	N/A	N/A	N/A	13	1/2	4 1/4	N/A	N/A	N/A	N/A	N/A	11	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	21	34	9/16" x 3/4"	29	22	10	7	1/4	756	185	748	185	18'-5"					
19'-5"	1 1/2	0.656	CP1152	344	11	1/2	18	11	3/4	5 1/2	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	18	29	9/16" x 3/4"	24	18	8	6	1/4	901	195	893	195	19'-5"					
20'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	10	3/4	5 1/2	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	16	26	9/16" x 3/4"	22	16	8	5	1/4	1000	205	992	206	20'-5"					
21'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	9	3/4	5 1/2	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	1/2	5 3/4	14	24	9/16" x 3/4"	19	14	7	5	1/4	1099	216	1091	216	21'-5"					
22'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	8	3/4	5 1/2	N/A	N/A	N/A	9	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	1/2	5 3/4	13	22	9/16" x 3/4"	17	12	6	N/A	1/4	1198	226	1190	226	22'-5"					
23'-5"	2	1.156	CP1152	445	10	5/8	18	12	3/4	5 1/2	N/A	N/A	N/A	9	5/8	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	25	34	11/16" x 7/8"	36	36	16	12	5/16	946	234	940	235	23'-5"					
24'-5"	2	1.156	CP1152	445	10	5/8	18	11	3/4	5 1/2	N/A	N/A	N/A	8	5/8	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	23	32	11/16" x 7/8"	36	33	15	11	5/16	1023	244	1018	245	24'-5"					
25'-5"	2	1.156	CP1152	445	9	5/8	18	10	3/4	5 1/2	N/A	N/A	N/A	8	5/8	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	22	29	11/16" x 7/8"	36	31	14	10	5/16	1101	254	1096	255	25'-5"					
26'-5"	2	1.156	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A	N/A	N/A	10	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	20	27	11/16" x 7/8"	36	28	13	9	5/16	1180	264	1174	265	26'-5"					
27'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A	N																																				

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CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 20 PSF - Continued																																										
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																										
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To	
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			
9'-5"	333*	N/A			34	2 3/8	4	33	2 3/8	3 3/4	34	2 1/2	4	36	2 1/2	4	33	2 1/4	4	36	3 1/2	4 3/4	36		36	N/A			30	1 7/8	3 1/4	34	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	9'-5"
9'-5"	344*	N/A			26	2 3/8	4	25	2 3/8	3 3/4	26	2 1/2	4	34	2 1/2	4	25	2 1/4	4	36	3 1/2	4 3/4	36		36	N/A			22	1 7/8	3 1/4	25	2 1/2	4	35	2 1/2	4	36	2 1/2	4	5 3/4	9'-5"
10'-5"	333	N/A			34	2 3/8	4	33	2 3/8	3 3/4	35	2 1/2	4	36	2 1/2	4	33	2 1/4	4	36	3 1/2	4 3/4	36		36	N/A			27	1 7/8	3 1/4	35	2 1/2	4	36	2 1/2	4	36	2 1/2	4	5 3/16	10'-5"
10'-5"	344	36	3 7/8	6	36	3 5/8	6	36	3 3/4	6	36	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6	36	4 1/4	5 1/2	36		36	36	3 7/8	6	36	2 1/2	4	36	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6 1/4	5 3/4	10'-5"
11'-5"	333	N/A			24	2 3/8	4	24	2 3/8	3 3/4	25	2 1/2	4	31	2 1/2	4	24	2 1/4	4	36	3 1/2	4 3/4	36		36	N/A			18	1 7/8	3 1/4	25	2 1/2	4	34	2 1/2	4	34	2 1/2	4	5 3/16	11'-5"
11'-5"	344	36	3 7/8	6	36	3 5/8	6	36	3 3/4	6	36	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6	36	4 1/4	5 1/2	36		36	36	3 7/8	6	32	2 1/2	4	36	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6 1/4	5 3/4	11'-5"
12'-5"	333	N/A			21	2 3/8	4	21	2 3/8	3 3/4	23	2 1/2	4	28	2 1/2	4	21	2 1/4	4	33	3 1/2	4 3/4	36		36	N/A			16	1 7/8	3 1/4	22	2 1/2	4	31	2 1/2	4	31	2 1/2	4	5 3/16	12'-5"
12'-5"	344	36	3 7/8	6	34	3 5/8	6	32	3 3/4	6	36	3 3/4	5 1/2	36	4 1/4	6 3/4	35	4	6	36	4 1/4	5 1/2	36		36	36	3 7/8	6	28	2 1/2	4	36	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6 1/4	5 3/4	12'-5"
13'-5"	333	N/A			19	2 3/8	4	19	2 3/8	3 3/4	21	2 1/2	4	25	2 1/2	4	19	2 1/4	4	28	3 1/2	4 3/4	36		36	N/A			14	1 7/8	3 1/4	20	2 1/2	4	28	2 1/2	4	28	2 1/2	4	5 3/16	13'-5"
13'-5"	344	34	3 7/8	6	31	3 5/8	6	29	3 3/4	6	33	3 3/4	5 1/2	36	4 1/4	6 3/4	32	4	6	36	4 1/4	5 1/2	36		36	34	3 7/8	6	25	2 1/2	4	34	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6 1/4	5 3/4	13'-5"
14'-5"	333	N/A			17	2 3/8	4	18	2 3/8	3 3/4	19	2 1/2	4	23	2 1/2	4	16	2 1/4	4	24	3 1/2	4 3/4	36		36	N/A			13	1 7/8	3 1/4	19	2 1/2	4	25	2 1/2	4	25	2 1/2	4	5 3/16	14'-5"
14'-5"	344	31	3 7/8	6	28	3 5/8	6	27	3 3/4	6	30	3 3/4	5 1/2	36	4 1/4	6 3/4	29	4	6	36	4 1/4	5 1/2	36		36	31	3 7/8	6	23	2 1/2	4	31	3 3/4	5 1/2	35	4 1/4	6 3/4	36	4	6 1/4	5 3/4	14'-5"
15'-5"	333	N/A			15	2 3/8	4	15	2 3/8	3 3/4	16	2 1/2	4	20	2 1/2	4	13	2 1/4	4	19	3 1/2	4 3/4	36		33	N/A			9	1 7/8	3 1/4	16	2 1/2	4	22	2 1/2	4	22	2 1/2	4	5 3/16	15'-5"
15'-5"	344	27	3 7/8	6	24	3 5/8	6	23	3 3/4	6	26	3 3/4	5 1/2	31	4 1/4	6 3/4	25	4	6	36	4 1/4	5 1/2	36		36	27	3 7/8	6	20	2 1/2	4	27	3 3/4	5 1/2	30	4 1/4	6 3/4	35	4	6 1/4	5 3/4	15'-5"
16'-5"	333	N/A			12	2 3/8	4	12	2 3/8	3 3/4	14	2 1/2	4	18	2 1/2	4	11	2 1/4	4	16	3 1/2	4 3/4	36		26	N/A			7	1 7/8	3 1/4	14	2 1/2	4	18	2 1/2	4	19	2 1/2	4	5 3/16	16'-5"
16'-5"	344	25	3 7/8	6	22	3 5/8	6	20	3 3/4	6	24	3 3/4	5 1/2	28	4 1/4	6 3/4	23	4	6	31	4 1/4	5 1/2	36		36	25	3 7/8	6	17	2 1/2	4	24	3 3/4	5 1/2	26	4 1/4	6 3/4	31	4	6 1/4	5 3/4	16'-5"
17'-5"	334	N/A			11	2 3/8	4	11	2 3/8	3 3/4	14	2 1/2	4	17	2 1/2	4	9	2 1/4	4	14	3 1/2	4 3/4	33		23	N/A				N/A		13	2 1/2	4	16	2 1/2	4	17	2 1/2	4	5 7/16	17'-5"
17'-5"	344	22	3 7/8	6	20	3 5/8	6	18	3 3/4	6	21	3 3/4	5 1/2	26	4 1/4	6 3/4	21	4	6	27	4 1/4	5 1/2	36		36	22	3 7/8	6	13	2 1/2	4	22	3 3/4	5 1/2	23	4 1/4	6 3/4	28	4	6 1/4	5 3/4	17'-5"
18'-5"	334	N/A			9	2 3/8	4	5	2 3/8	4	12	2 1/2	4	5	2 1/2	4	5	2 1/4	4	12	3 1/2	4 3/4	28		18	N/A				N/A		12	2 1/2	4	5	2 1/2	4	18	3 1/4	5	5 7/16	18'-5"
18'-5"	344	21	3 7/8	6	18	3 5/8	6	17	3 3/4	6	20	3 3/4	5 1/2	24	4 1/4	6 3/4	19	4	6	23	4 1/4	5 1/2	36		36	21	3 7/8	6	10	2 1/2	4	20	3 3/4	5 1/2	21	4 1/4	6 3/4	26	4	6 1/4	5 3/4	18'-5"
19'-5"	344	19	3 7/8	6	14	3 5/8	6	15	3 3/4	6	18	3 3/4	5 1/2	21	4 1/4	6 3/4	16	4	6	20	4 1/4	5 1/2	36		36	18	3 7/8	6		N/A		18	3 3/4	5 1/2	16	4 1/4	6 3/4	24	4	6 1/4	5 3/4	19'-5"
20'-5"	344	17	3 7/8	6	9	3 5/8	6	13	3 3/4	6	9	3 3/4	5 1/2	20	4 1/4	6 3/4	14	4	6	18	4 1/4	5 1/2	36		36	16	3 7/8	6		N/A		17	3 3/4	5 1/2	13	4 1/4	6 3/4	22	4	6 1/4	5 3/4	20'-5"
21'-5"	344	16	3 7/8	6	9	3 5/8	6	10	3 3/4	6	9	3 3/4	5 1/2	19	4 1/4	6 3/4	13	4	6	16	4 1/4	5 1/2	36		31	14	3 7/8	6		N/A		16	3 3/4	5 1/2	11	4 1/4	6 3/4	21	4	6 1/4	5 3/4	21'-5"
22'-5"	344	14	3 7/8	6	9	3 5/8	6	9	3 3/4	6	9	3 3/4	5 1/2	18	4 1/4	6 3/4	11	4	6	15	4 1/4	5 1/2	36		27	13	3 7/8	6		N/A		9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	22'-5"
23'-5"	445	25	5 1/8	7 7/8	22	4 1/2	6	22	4 5/8	7	23	4 1/2	6	25	5	7		N/A		29	5	6 1/4	36		36	24	5 1/8	7 7/8		N/A		24	4 1/2	6		N/A		29	5 1/2	8 1/2	6 13/16	23'-5"
24'-5"	445	23	5 1/8	7 7/8	21	4 1/2	6	21	4 5/8	7	22	4 1/2	6	24	5	7		N/A		27	5	6 1/4	36		36	23	5 1/8	7 7/8		N/A		23	4 1/2	6		N/A		28	5 1/2	8 1/2	6 13/16	24'-5"
25'-5"	445	22	5 1/8	7 7/8	20	4 1/2	6	20	4 5/8	7	21	4 1/2	6	23	5	7		N/A		25	5	6 1/4	36		36	22	5 1/8	7 7/8		N/A		22	4 1/2	6		N/A		26	5 1/2	8 1/2	6 13/16	25'-5"
26'-5"	445	21	5 1/8	7 7/8	19	4 1/2	6	19	4 5/8	7	20	4 1/2	6	22	5	7		N/A		24	5	6 1/4	36		36	21	5 1/8	7 7/8		N/A		21	4 1/2	6		N/A		25	5 1/2	8 1/2	6 13/16	26'-5"
27'-5"	445	21	5 1/8	7 7/8	19	4 1/2	6	18	4 5/8	7	20	4 1/2	6	21	5	7		N/A		22	5	6 1/4	36		36	20	5 1/8	7 7/8		N/A		20	4 1/2	6		N/A		24	5 1/2	8 1/2	6 13/16	27'-5"
28'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	20	5	7		N/A		21	5	6 1/4	36		36	19	5 1/8	7 7/8		N/A		19	4 1/2	6		N/A		23	5 1/2	8 1/2	6 13/16	28'-5"
29'-5"	445	19	5 1/8	7 7/8	17	4 1/2	6	16	4 5/8	7	18	4 1/2	6	19	5	7		N/A		20	5	6 1/4	36		36	19	5 1/8	7 7/8		N/A		18	4 1/2	6		N/A		21	5 1/2	8 1/2	6 13/16	29'-5"
30'-5"	445	18	5 1/8	7 7/8	16	4 1/2	6	11	4 5/8	7	11	4 1/2	6	19	5	7		N/A		19	5	6 1/4	36		36	18	5 1/8	7 7/8		N/A		11	4 1/2	6		N/A		20	5 1/2	8 1/2	6 13/16	30'-5"
31'-5"	445	18	5 1/8	7 7/8	16	4 1/2	6	11	4 5/8	7	11	4 1/2																														

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Guide Construction								CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 30 PSF																														Steel (Wall anchors are the same diameter as assembly fasteners)											
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Filed CMU																								Steel (Wall anchors are the same diameter as assembly fasteners)												D.B.G. Up To					
								Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud® SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads									
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)						
7'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	11	3/8	1 7/8	13	3/8	2 3/8	13	3/8	2 5/8	9	3/8	1 5/8	14	3/8	2 3/4	9	3/8	2	12	3/8	2 3/4	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	112	0	111	7'-5"					
7'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	12	3/8	3	9	1/2	2 1/2	9	1/2	3 1/2	20	3/8	3 1/4	15	5/8	4 1/2	20	3/8	3 1/4	15	5/8	4 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	113	0	111	7'-5"					
10'-5"	1 1/16	0.282	CP1151	333	12	3/8	18	9	1/2	3 3/4	13	5/8	4 3/8	13	3/8	3 1/4	14	3/4	5 1/2	13	3/8	3 1/4	N/A	8	3/8	5 3/16	32	36	7/16" x 5/8"	31	24	11	9	3/16	389	157	366	157	10'-5"										
10'-5"	1 1/16	0.282	CP1151	344	12	1/2	18	11	1/2	3 3/4	8	1/2	2 1/2	8	1/2	3 1/2	26	1/2	4 1/4	14	5/8	4 1/2	24	1/2	4 1/4	10	5/8	4 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	19	14	1/4	393	158	366	157	10'-5"					
11'-5"	1 1/8	0.344	CP1151	333	12	3/8	17	9	5/8	4 1/2	N/A	8	5/8	4 3/8	9	3/8	3 1/4	N/A	9	3/8	3 1/4	N/A	8	3/8	5 3/16	23	36	7/16" x 5/8"	23	17	8	7	3/16	522	172	503	172	11'-5"											
11'-5"	1 1/8	0.344	CP1151	344	12	1/2	18	8	1/2	3 3/4	8	5/8	3 3/8	9	5/8	4 3/8	20	1/2	4 1/4	13	3/4	5 1/2	18	1/2	4 1/4	N/A	8	1/2	5 3/4	30	36	9/16" x 3/4"	36	32	15	10	1/4	526	173	503	172	11'-5"							
12'-5"	1 1/4	0.469	CP1151	333	12	3/8	16	8	5/8	4 1/2	N/A	8	5/8	4 3/8	8	3/8	3 1/4	N/A	12	1/2	4 1/4	N/A	8	3/8	5 3/16	22	34	7/16" x 5/8"	21	15	8	6	3/16	566	187	550	187	12'-5"											
12'-5"	1 1/4	0.469	CP1151	344	12	1/2	18	8	1/2	3 3/4	N/A	8	5/8	4 3/8	19	1/2	4 1/4	12	3/4	5 1/2	16	1/2	4 1/4	N/A	8	1/2	5 3/4	28	36	9/16" x 3/4"	36	30	13	10	1/4	569	187	550	187	12'-5"									
13'-5"	1 3/8	0.594	CP1151	334	12	3/8	14	8	5/8	4 1/2	N/A	8	3/4	5 1/4	8	3/8	3 1/4	N/A	12	1/2	4 1/4	N/A	8	3/8	5 7/16	20	31	7/16" x 5/8"	19	13	7	6	3/16	620	202	607	202	13'-5"											
13'-5"	1 3/8	0.594	CP1151	344	12	1/2	18	9	5/8	4 1/2	N/A	8	5/8	4 3/8	17	1/2	4 1/4	N/A	14	1/2	4 1/4	N/A	8	1/2	5 3/4	25	36	9/16" x 3/4"	35	27	12	9	1/4	622	202	607	202	13'-5"											
14'-5"	1 1/2	0.719	CP1151	334	12	3/8	13	13	3/4	5 1/2	N/A	N/A	N/A	13	1/2	4 1/4	N/A	11	1/2	4 1/4	N/A	8	3/8	5 7/16	19	29	7/16" x 5/8"	17	11	6	5	3/16	676	217	666	217	14'-5"												
14'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	8	5/8	4 1/2	N/A	8	3/4	5 1/4	15	1/2	4 1/4	N/A	12	1/2	4 1/4	N/A	8	1/2	5 3/4	23	36	9/16" x 3/4"	32	25	11	8	1/4	678	217	666	217	14'-5"											
15'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	12	3/4	5 1/2	N/A	N/A	N/A	11	1/2	4 1/4	N/A	9	1/2	4 1/4	N/A	8	1/2	5 3/4	19	31	9/16" x 3/4"	27	20	9	7	1/4	819	232	807	232	15'-5"												
16'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	10	3/4	5 1/2	N/A	N/A	N/A	9	1/2	4 1/4	N/A	8	1/2	4 1/4	N/A	8	1/2	5 3/4	16	25	9/16" x 3/4"	21	15	7	5	1/4	1015	248	1003	248	16'-5"												
17'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	8	3/4	5 1/2	N/A	N/A	N/A	9	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	8	1/2	5 3/4	14	22	9/16" x 3/4"	18	12	6	5	1/4	1156	263	1144	263	17'-5"												
18'-5"	2	1.156	CP1152	445	10	5/8	18	12	3/4	5 1/2	N/A	N/A	N/A	9	5/8	5	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	16	25	9/16" x 3/4"	18	12	6	5	1/4	1156	263	1144	263	17'-5"												
19'-5"	2	1.156	CP1152	445	10	5/8	18	10	3/4	5 1/2	N/A	N/A	N/A	8	5/8	5	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	26	35	11/16" x 7/8"	36	36	17	12	5/16	925	276	917	277	18'-5"												
20'-5"	2	1.156	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A	N/A	N/A	10	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	21	28	11/16" x 7/8"	36	29	13	9	5/16	1145	306	1137	307	20'-5"												
21'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A	N/A	N/A	9	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	19	26	11/16" x 7/8"	35	27	12	9	5/16	1255	321	1247	322	21'-5"												
22'-5"	2	1.156	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	17	24	11/16" x 7/8"	32	24	11	8	5/16	1366	336	1358	337	22'-5"												
23'-5"	2	1.156	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	16	22	11/16" x 7/8"	29	22	10	7	5/16	1477	352	1469	353	23'-5"												
24'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	27	19	9	7	5/16	1588	367	1580	368	24'-5"												
25'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	14	19	11/16" x 7/8"	25	18	9	6	5/16	1701	382	1693	383	25'-5"												
26'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	18	11/16" x 7/8"	22	15	8	5	5/16	1815	397	1807	398	26'-5"												
27'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	20	14	7	5	5/16	1931	413	1922	414	27'-5"												
28'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	18	12	7	5	5/16	2047	428	2039	429	28'-5"												
29'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	11	6	N/A	5/16	2165	444	2157	445	29'-5"												
30'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	16	10	6	N/A	5/16	2285	459	2276	460	30'-5"												
31'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2405	474	2397	476	31'-5"												
32'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	13	9	5	N/A	5/16	2528	490	2519	491	32'-5"												
33'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	8	12	11/16" x 7/8"	12	8	5	N/A	5/16	2652	506	2643	507	33'-5"												
34'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	15	16	7/8" x 1"	34	25	12	8	3/8	2305	518	2297	518	34'-5"												
35'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	16	7/8" x 1"	31	23	11	8	3/8	2411	533	2403	534	35'-5"												
36'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	15	7/8" x 1"	31	22	11	8	3/8	2518	549	2510	549	36'-5"												
37'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	14	7/8" x 1"	29	20	10	7	3/8	2627	564	2619	565	37'-5"												
38'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	14	7/8" x 1"	28	19	10	7	3/8	2737	580	2729	580	38'-5"												
39'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2848	595	2840	596	39'-5"												
40'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	13	7/8" x 1"	25	17	9	6	3/8	2961	611	2952	611	40'-5"												



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are: 0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG		
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM				
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT IMPACT RATED		DRAWN BY: KAD	SIZE: B	SCALE: AS NOTED	SHEET: 22/43
		DWG NO: ES-16-134-CIW			

REVIEWED FOR SPECIFIED DOOR COMPONENTS ONLY, EXISTING STRUCTURE NOT ANALYZED

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 30 PSF - Continued																																													
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																													
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To				
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.						
7'-5"	333*		N/A		31	2 3/8	4	30	2 3/8	3 3/4	31	2 1/2	4	36	2 1/2	4	30	2 1/4	4	36	3 1/2	4 3/4	36	36		N/A		27	1 7/8	3 1/4	31	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	7'-5"				
7'-5"	344*		N/A		23	2 3/8	4	23	2 3/8	3 3/4	24	2 1/2	4	31	2 1/2	4	23	2 1/4	4	36	3 1/2	4 3/4	36	36		N/A		20	1 7/8	3 1/4	23	2 1/2	4	32	2 1/2	4	33	2 1/2	4	5 3/4	7'-5"				
10'-5"	333		N/A		16	2 3/8	4	16	2 3/8	3 3/4	17	2 1/2	4	21	2 1/2	4	14	2 1/4	4	20	3 1/2	4 3/4	36	36		N/A		11	1 7/8	3 1/4	17	2 1/2	4	23	2 1/2	4	23	2 1/2	4	5 3/16	10'-5"				
10'-5"	344	29	3 7/8	6	26	3 5/8	6	24	3 3/4	6	28	3 3/4	5 1/2	33	4 1/4	6 3/4	27	4	6	36	4 1/4	5 1/2	36	36	29	3 7/8	6	21	2 1/2	4	28	3 3/4	5 1/2	31	4 1/4	6 3/4	36	4	6 1/4	5 3/4	10'-5"				
11'-5"	333		N/A		12	2 3/8	4	13	2 3/8	3 3/4	15	2 1/2	4	18	2 1/2	4	11	2 1/4	4	16	3 1/2	4 3/4	36	29		N/A		7	1 7/8	3 1/4	14	2 1/2	4	20	2 1/2	4	20	2 1/2	4	5 3/16	11'-5"				
11'-5"	344	25	3 7/8	6	22	3 5/8	6	21	3 3/4	6	24	3 3/4	5 1/2	29	4 1/4	6 3/4	23	4	6	32	4 1/4	5 1/2	36	36	25	3 7/8	6	18	2 1/2	4	24	3 3/4	5 1/2	27	4 1/4	6 3/4	32	4	6 1/4	5 3/4	11'-5"				
12'-5"	333		N/A		12	2 3/8	4	12	2 3/8	3 3/4	14	2 1/2	4	18	2 1/2	4	10	2 1/4	4	15	3 1/2	4 3/4	36	25		N/A		6	1 7/8	3 1/4	14	2 1/2	4	17	2 1/2	4	19	2 1/2	4	5 3/16	12'-5"				
12'-5"	344	24	3 7/8	6	21	3 5/8	6	20	3 3/4	6	23	3 3/4	5 1/2	28	4 1/4	6 3/4	22	4	6	30	4 1/4	5 1/2	36	36	24	3 7/8	6	16	2 1/2	4	23	3 3/4	5 1/2	25	4 1/4	6 3/4	30	4	6 1/4	5 3/4	12'-5"				
13'-5"	334		N/A		11	2 3/8	4	12	2 3/8	3 3/4	14	2 1/2	4	17	2 1/2	4	10	2 1/4	4	15	3 1/2	4 3/4	35	25		N/A		6	1 7/8	3 1/4	14	2 1/2	4	17	2 1/2	4	18	2 1/2	4	5 7/16	13'-5"				
13'-5"	344	23	3 7/8	6	20	3 5/8	6	19	3 3/4	6	22	3 3/4	5 1/2	26	4 1/4	6 3/4	21	4	6	27	4 1/4	5 1/2	36	36	23	3 7/8	6	14	2 1/2	4	22	3 3/4	5 1/2	24	4 1/4	6 3/4	29	4	6 1/4	5 3/4	13'-5"				
14'-5"	334		N/A		10	2 3/8	4	11	2 3/8	3 3/4	13	2 1/2	4	16	2 1/2	4	9	2 1/4	4	14	3 1/2	4 3/4	31	21		N/A					13	2 1/2	4	5	2 1/2	4	19	3 1/4	5	5 7/16	14'-5"				
14'-5"	344	22	3 7/8	6	19	3 5/8	6	18	3 3/4	6	21	3 3/4	5 1/2	25	4 1/4	6 3/4	20	4	6	25	4 1/4	5 1/2	36	36	22	3 7/8	6	12	2 1/2	4	21	3 3/4	5 1/2	23	4 1/4	6 3/4	27	4	6 1/4	5 3/4	14'-5"				
15'-5"	344	19	3 7/8	6	16	3 5/8	6	16	3 3/4	6	19	3 3/4	5 1/2	22	4 1/4	6 3/4	17	4	6	21	4 1/4	5 1/2	36	36	19	3 7/8	6				19	3 3/4	5 1/2	18	4 1/4	6 3/4	25	4	6 1/4	5 3/4	15'-5"				
16'-5"	344	17	3 7/8	6	9	3 5/8	6	12	3 3/4	6	9	3 3/4	5 1/2	20	4 1/4	6 3/4	14	4	6	17	4 1/4	5 1/2	36	34	15	3 7/8	6		N/A		17	3 3/4	5 1/2	13	4 1/4	6 3/4	22	4	6 1/4	5 3/4	16'-5"				
17'-5"	344	15	3 7/8	6	9	3 5/8	6	9	3 3/4	6	9	3 3/4	5 1/2	18	4 1/4	6 3/4	11	4	6	15	4 1/4	5 1/2	36	28	13	3 7/8	6		N/A		9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	17'-5"				
18'-5"	445	24	5 1/8	7 7/8	22	4 1/2	6	22	4 5/8	7	23	4 1/2	6	25	5	7		N/A		29	5	6 1/4	36	36	24	5 1/8	7 7/8		N/A		24	4 1/2	6		N/A		29	5 1/2	8 1/2	6 13/16	18'-5"				
19'-5"	445	23	5 1/8	7 7/8	21	4 1/2	6	20	4 5/8	7	22	4 1/2	6	23	5	7		N/A		26	5	6 1/4	36	36	22	5 1/8	7 7/8		N/A		22	4 1/2	6		N/A		27	5 1/2	8 1/2	6 13/16	19'-5"				
20'-5"	445	22	5 1/8	7 7/8	19	4 1/2	6	19	4 5/8	7	20	4 1/2	6	22	5	7		N/A		24	5	6 1/4	36	36	21	5 1/8	7 7/8		N/A		21	4 1/2	6		N/A		25	5 1/2	8 1/2	6 13/16	20'-5"				
21'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	21	5	7		N/A		22	5	6 1/4	36	36	20	5 1/8	7 7/8		N/A		20	4 1/2	6		N/A		24	5 1/2	8 1/2	6 13/16	21'-5"				
22'-5"	445	19	5 1/8	7 7/8	17	4 1/2	6	16	4 5/8	7	18	4 1/2	6	20	5	7		N/A		20	5	6 1/4	36	36	19	5 1/8	7 7/8		N/A		19	4 1/2	6		N/A		22	5 1/2	8 1/2	6 13/16	22'-5"				
23'-5"	445	18	5 1/8	7 7/8	16	4 1/2	6	11	4 5/8	7	11	4 1/2	6	19	5	7		N/A		19	5	6 1/4	36	36	18	5 1/8	7 7/8		N/A		11	4 1/2	6		N/A		20	5 1/2	8 1/2	6 13/16	23'-5"				
24'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	10	4 5/8	7	10	4 1/2	6	18	5	7		N/A		17	5	6 1/4	36	36	17	5 1/8	7 7/8		N/A		10	4 1/2	6		N/A		19	5 1/2	8 1/2	6 13/16	24'-5"				
25'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7		N/A		16	5	6 1/4	36	35	15	5 1/8	7 7/8		N/A		9	4 1/2	6		N/A		10	5 1/2	8 1/2	6 13/16	25'-5"				
26'-5"	546	16	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	11	5	7		N/A		12	5	6 1/4	36	33	11	5 1/8	7 7/8		N/A		9	4 1/2	6		N/A		10	5 1/2	8 1/2	6 7/8	26'-5"				
27'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	10	5	7		N/A		11	5	6 1/4	36	30	10	5 1/8	7 7/8		N/A		8	4 1/2	6		N/A		10	5 1/2	8 1/2	6 7/8	27'-5"				
28'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7		N/A		9	5	6 1/4	36	27	9	5 1/8	7 7/8		N/A		6	4 1/2	6		N/A		9	5 1/2	8 1/2	6 7/8	28'-5"				
29'-5"	546	9	5 1/8	7 7/8	6	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7		N/A		7	5	6 1/4	36	25	8	5 1/8	7 7/8		N/A		5	4 1/2	6		N/A		8	5 1/2	8 1/2	6 7/8	29'-5"				
30'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7		N/A		5	5	6 1/4	34	23	7	5 1/8	7 7/8		N/A		5	3 3/4	5 1/2		N/A		7	5 1/2	8 1/2	6 7/8	30'-5"				
31'-5"	546	8	5 1/8	7 7/8		N/A			N/A			N/A		7	5	7		N/A			N/A		32	21		N/A			N/A			N/A			N/A		6	5 1/2	8 1/2	6 7/8	31'-5"				
32'-5"	546	7	5 1/8	7 7/8		N/A			N/A			N/A		6	5	7		N/A			N/A		29	19		N/A			N/A			N/A			N/A		5	5 1/2	8 1/2	6 7/8	32'-5"				
33'-5"	546	6	5 1/8	7 7/8		N/A			N/A			N/A		5	5	7		N/A			N/A		27	17		N/A			N/A			N/A			N/A			N/A		6	7/8	33'-5"			
34'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8		N/A		9	5 1/2	8	11	6 1/4	8 1/8		N/A		12	6 5/8	7 7/8	36	36	11	5 3/4	8 3/4		N/A		8	5 1/2	8		N/A		10	6 1/4	10	7 1/2	34'-5"				
35'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8		N/A		8	5 1/2	8	10	6 1/4	8 1/8		N/A		10	6 5/8	7 7/8	36	36	11	5 3/4	8 3/4		N/A		7	5 1/2	8		N/A		10	6 1/4	10	7 1/2	35'-5"				
36'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8																																						

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 40 PSF																																												
Guide Construction								Filled CMU																Steel (Wall anchors are the same diameter as assembly fasteners)																				
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud-SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Embed	Max O.C.	Dia.	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	
6'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	10	3/8	1 7/8	11	3/8	2 3/8	11	3/8	2 5/8	31	3/8	3 1/4	12	3/8	2 3/4	8	3/8	2	11	3/8	2 3/4	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	130	0	128	6'-5"
6'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	10	3/8	3	10	5/8	3 3/8	13	5/8	4 3/8	13	3/8	3 1/4	13	5/8	4 1/2	17	3/8	3 1/4	13	5/8	4 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	130	0	128	6'-5"
10'-5"	1 1/16	0.282	CP1151	334	12	3/8	13	12	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	11	1/2	4 1/4	N/A	N/A	N/A	9	1/2	4 1/4	8	3/8	5 7/16	18	26	7/16" x 5/8"	15	10	6	5	3/16	716	210	689	210	10'-5"			
10'-5"	1 1/16	0.282	CP1151	344	12	1/2	18	8	5/8	4 1/2	N/A	N/A	8	3/4	5 1/4	13	1/2	4 1/4	N/A	N/A	N/A	11	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	22	34	9/16" x 3/4"	30	23	11	7	1/4	721	210	689	210	10'-5"	
11'-5"	1 3/16	0.344	CP1152	344	11	1/2	18	11	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	18	29	9/16" x 3/4"	25	19	9	6	1/4	866	231	839	230	11'-5"
12'-5"	1 5/16	0.469	CP1152	344	11	1/2	18	11	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	18	28	9/16" x 3/4"	24	18	8	6	1/4	897	250	875	250	12'-5"
13'-5"	1 1/2	0.656	CP1152	344	11	1/2	18	11	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	18	29	9/16" x 3/4"	25	18	9	6	1/4	883	270	867	270	13'-5"
14'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	9	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	N/A	8	1/2	5 3/4	15	24	9/16" x 3/4"	20	14	7	5	1/4	1069	290	1054	290	14'-5"
15'-5"	1 3/4	0.906	CP1152	445	10	5/8	18	10	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	23	32	11/16" x 7/8"	36	33	15	11	5/16	1024	308	1011	309	15'-5"
16'-5"	2	1.156	CP1152	445	10	5/8	18	10	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	5	N/A	N/A	N/A	8	5/8	6 13/16	23	32	11/16" x 7/8"	36	33	1004	328	1014	328	1014	328	1014	328	1014	328	16'-5"			
17'-5"	2	1.156	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	10	3/4	6 1/4	N/A	N/A	N/A	8	5/8	6 13/16	21	28	11/16" x 7/8"	36	29	13	9	5/16	1156	348	1146	349	17'-5"						
18'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	18	25	11/16" x 7/8"	33	26	12	8	5/16	1296	368	1286	369	18'-5"
19'-5"	2	1.156	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	16	22	11/16" x 7/8"	30	22	10	7	5/16	1437	388	1427	389	19'-5"
20'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	27	20	9	7	5/16	1578	408	1568	410	20'-5"
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	13	19	11/16" x 7/8"	23	16	8	6	5/16	1720	429	1710	430	21'-5"
22'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	21	15	8	5	5/16	1863	449	1853	450	22'-5"	
23'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	2007	469	1997	471	23'-5"	
24'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	11	6	5	5/16	2153	490	2143	491	24'-5"	
25'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	15	10	6	N/A	5/16	2301	510	2290	512	25'-5"	
26'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2451	531	2440	532	26'-5"	
27'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	8	12	11/16" x 7/8"	13	8	5	N/A	5/16	2602	552	2591	553	27'-5"	
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	15	16	7/8" x 1"	34	25	12	8	3/8	2282	569	2272	570	28'-5"	
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	15	7/8" x 1"	32	23	11	8	3/8	2412	590	2402	590	29'-5"	
30'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	15	7/8" x 1"	30	21	10	7	3/8	2545	610	2535	611	30'-5"	
31'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	14	7/8" x 1"	28	20	10	7	3/8	2678	631	2668	631	31'-5"	
32'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2814	651	2804	652	32'-5"	
33'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	13	7/8" x 1"	25	17	9	6	3/8	2951	672	2941	672	33'-5"	
34'-5"	2 9/16	1.719	CP1152 & CP1153	DC6	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	9 1/4	11	12	7/8" x 1"	24	16	9	6	3/8	3031	692	3021	692	34'-5"	



24 ELMWOOD AVE 1901 S. LITCHFIELD RD
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Unless otherwise specified,
dimensions are in inches &
tolerances are:

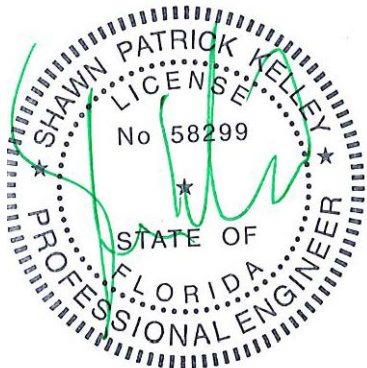
0.000 = +/- 0.031
FRACTIONAL = +/- 1/32
ANGLES = +/- 1/2 DEG

TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT IMPACT RATED	DRAWN BY: KAD	SIZE: B	SCALE: AS NOTED	SHEET: 24/43
	DWG NO: ES-16-134-CIW			

REVIEWED FOR SPECIFIED DOOR COMPONENTS ONLY, EXISTING STRUCTURE NOT ANALYZED

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 40 PSF - Continued																																														
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																														
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To					
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.							
6'-5"	333*		N/A		32	2 3/8	4	31	2 3/8	3 3/4	32	2 1/2	4	36	2 1/2	4	31	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A		28	1 7/8	3 1/4	31	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	6'-5"				
6'-5"	344*		N/A		24	2 3/8	4	23	2 3/8	3 3/4	24	2 1/2	4	29	2 1/2	4	23	2 1/4	4	36	3 1/2	4 3/4	36		32		N/A		21	1 7/8	3 1/4	24	2 1/2	4	33	2 1/2	4	5 3/4	6'-5"							
10'-5"	334		N/A		9	2 3/8	4	5	2 3/8	4	12	2 1/2	4	5	2 1/2	4	5	2 1/4	4	12	3 1/2	4 3/4	29		13		N/A			N/A		12	2 1/2	4	5	2 1/2	4		N/A		5 7/16	10'-5"				
10'-5"	344	21	3 7/8	6	18	3 5/8	6	17	3 3/4	6	20	3 3/4	5 1/2	24	4 1/4	6 3/4	19	4	6	23	4 1/4	5 1/2	36		23		21	3 7/8	6	10	2 1/2	4	20	3 3/4	5 1/2	21	4 1/4	6 3/4	26	4	6 1/4	5 3/4	10'-5"			
11'-5"	334		N/A		5	2 3/8	4	5	2 3/8	4	5	2 1/2	4	5	2 1/2	4	5	2 1/4	4	11	3 1/2	4 3/4	25		11			N/A			N/A		5	2 1/2	4	5	2 1/2	4		N/A		5 7/16	11'-5"			
11'-5"	344	19	3 7/8	6	14	3 5/8	6	15	3 3/4	6	18	3 3/4	5 1/2	21	4 1/4	6 3/4	16	4	6	20	4 1/4	5 1/2	36		20		18	3 7/8	6		N/A		18	3 3/4	5 1/2	16	4 1/4	6 3/4	24	4	6 1/4	5 3/4	11'-5"			
12'-5"	334		N/A		5	2 3/8	4	5	2 3/8	4	5	2 1/2	4	5	2 1/2	4	5	2 1/4	4	10	3 1/2	4 3/4	36		11			N/A			N/A		5	2 1/2	4	5	2 1/2	4		N/A		5 7/16	12'-5"			
12'-5"	344	18	3 7/8	6	13	3 5/8	6	15	3 3/4	6	17	3 3/4	5 1/2	21	4 1/4	6 3/4	15	4	6	19	4 1/4	5 1/2	36		20		17	3 7/8	6		N/A		18	3 3/4	5 1/2	15	4 1/4	6 3/4	23	4	6 1/4	5 3/4	12'-5"			
13'-5"	334		N/A		5	2 3/8	4	5	2 3/8	4	5	2 1/2	4	5	2 1/2	4	5	2 1/4	4	10	3 1/2	4 3/4	34		7			N/A			N/A		5	2 1/2	4	5	2 1/2	4		N/A		5 7/16	13'-5"			
13'-5"	344	18	3 7/8	6	9	3 5/8	6	13	3 3/4	6	9	3 3/4	5 1/2	20	4 1/4	6 3/4	15	4	6	18	4 1/4	5 1/2	36		19		16	3 7/8	6		N/A		17	3 3/4	5 1/2	14	4 1/4	6 3/4	22	4	6 1/4	5 3/4	13'-5"			
14'-5"	334		N/A		5	2 3/8	4	5	2 3/8	4	5	2 1/2	4	5	2 1/2	4	5	2 1/4	4	9	3 1/2	4 3/4	30		6			N/A			N/A		5	2 1/2	4	5	2 1/2	4		N/A		5 7/16	14'-5"			
14'-5"	344	16	3 7/8	6	9	3 5/8	6	10	3 3/4	6	9	3 3/4	5 1/2	19	4 1/4	6 3/4	13	4	6	16	4 1/4	5 1/2	36		17		14	3 7/8	6		N/A		15	3 3/4	5 1/2	11	4 1/4	6 3/4	21	4	6 1/4	5 3/4	14'-5"			
15'-5"	445	23	5 1/8	7 7/8	21	4 1/2	6	21	4 5/8	7	22	4 1/2	6	23	5	7		N/A		26	5	6 1/4	36		27		22	5 1/8	7 7/8		N/A		22	4 1/2	6		N/A		27	5 1/2	8 1/2	6 13/16	15'-5"			
16'-5"	445	23	5 1/8	7 7/8	21	4 1/2	6	20	4 5/8	7	22	4 1/2	6	23	5	7		N/A		26	5	6 1/4	36		27		22	5 1/8	7 7/8		N/A		22	4 1/2	6		N/A		27	5 1/2	8 1/2	6 13/16	16'-5"			
17'-5"	445	21	5 1/8	7 7/8	19	4 1/2	6	19	4 5/8	7	20	4 1/2	6	22	5	7		N/A		23	5	6 1/4	36		24		21	5 1/8	7 7/8		N/A		21	4 1/2	6		N/A		25	5 1/2	8 1/2	6 13/16	17'-5"			
18'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	20	5	7		N/A		21	5	6 1/4	36		22		19	5 1/8	7 7/8		N/A		19	4 1/2	6		N/A		23	5 1/2	8 1/2	6 13/16	18'-5"			
19'-5"	445	19	5 1/8	7 7/8	16	4 1/2	6	11	4 5/8	7	17	4 1/2	6	19	5	7		N/A		19	5	6 1/4	36		19		18	5 1/8	7 7/8		N/A		18	4 1/2	6		N/A		21	5 1/2	8 1/2	6 13/16	19'-5"			
20'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	10	4 5/8	7	10	4 1/2	6	18	5	7		N/A		17	5	6 1/4	36		18		17	5 1/8	7 7/8		N/A		10	4 1/2	6		N/A		19	5 1/2	8 1/2	6 13/16	20'-5"			
21'-5"	546	17	5 1/8	7 7/8	10	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7		N/A		13	5	6 1/4	36		16		15	5 1/8	7 7/8		N/A		9	4 1/2	6		N/A		10	5 1/2	8 1/2	6 7/8	21'-5"			
22'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7		N/A		12	5	6 1/4	36		15		10	5 1/8	7 7/8		N/A		8	4 1/2	6		N/A		10	5 1/2	8 1/2	6 7/8	22'-5"			
23'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7		N/A		10	5	6 1/4	34		14		9	5 1/8	7 7/8		N/A		7	4 1/2	6		N/A		9	5 1/2	8 1/2	6 7/8	23'-5"			
24'-5"	546	9	5 1/8	7 7/8	6	4 1/2	6	5	4 5/8	7	6	4 1/2	6	9	5	7		N/A		7	5	6 1/4	32		13		8	5 1/8	7 7/8		N/A		5	4 1/2	6		N/A		8	5 1/2	8 1/2	6 7/8	24'-5"			
25'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6		N/A			N/A		7	5	7		N/A		5	5	6 1/4	30		12		7	5 1/8	7 7/8		N/A			N/A			N/A		7	5 1/2	8 1/2	6 7/8	25'-5"			
26'-5"	546	7	5 1/8	7 7/8		N/A			N/A			N/A		6	5	7		N/A			N/A		28		8			N/A			N/A			N/A			N/A		6	5 1/2	8 1/2	6 7/8	26'-5"			
27'-5"	546	6	5 1/8	7 7/8		N/A			N/A			N/A		5	5	7		N/A			N/A		27		11			N/A			N/A			N/A			N/A		5	5 1/2	8 1/2	6 7/8	27'-5"			
28'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8		N/A		9	5 1/2	8	11	6 1/4	8 1/8		N/A		12	6 5/8	7 7/8	36		18		11	5 3/4	8 3/4		N/A		8	5 1/2	8		N/A		10	6 1/4	10	7 1/2	28'-5"			
29'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8		N/A		8	5 1/2	8	10	6 1/4	8 1/8		N/A		10	6 5/8	7 7/8	36		17		11	5 3/4	8 3/4		N/A		7	5 1/2	8		N/A		10	6 1/4	10	7 1/2	29'-5"			
30'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8		N/A		7	5 1/2	8	9	6 1/4	8 1/8		N/A		8	6 5/8	7 7/8	36		16		10	5 3/4	8 3/4		N/A		6	5 1/2	8		N/A		9	6 1/4	10	7 1/2	30'-5"			
31'-5"	648	8	5 3/4	8 3/4		N/A			N/A		6	5 1/2	8	8	6 1/4	8 1/8		N/A		6	6 5/8	7 7/8	36		15		9	5 3/4	8 3/4		N/A		5	5 1/2	8		N/A		8	6 1/4	10	7 1/2	31'-5"			
32'-5"	648	7	5 3/4	8 3/4		N/A			N/A		5	5 1/2	8	7	6 1/4	8 1/8		N/A			N/A		35		14		8	5 3/4	8 3/4		N/A			N/A			N/A		7	6 1/4	10	7 1/2	32'-5"			
33'-5"	648	7	5 3/4	8 3/4		N/A			N/A			N/A		6	6 1/4	8 1/8		N/A			N/A		33		14		7	5 3/4	8 3/4		N/A			N/A			N/A		6	6 1/4	10	7 1/2	33'-5"			
34'-5"	DC3	7	5 3/4	8 3/4	9	5 1/2	8	7	5 5/8	10	10	5 1/2	8	10	6 1/4	8 1/8		N/A		12	6 5/8	7 7/8	36		13		12	5 3/4	8 3/4	10	4 1/2	6	9	5 1/2	8		N/A		10	6 1/4	10	9 1/4	34'-5"			



24 ELMWOOD AVE 1901 S. LITCHFIELD RD
MOUNTAINTOP, PA GOODYEAR, AZ

P: 800.233.8366
F: 800.526.0841
E: ADS@CORNELLIRON.COM

Unless otherwise specified,
dimensions are in inches &
tolerances are:

0.000 = +/- 0.031
FRACTIONAL = +/- 1/32
ANGLES = +/- 1/2 DEG

TITLE: WIND LOAD CONFIGURATION
NON-INSULATED ROLLING STEEL DOOR
CP0020 SLAT IMPACT RATED

DRAWN BY: KAD
DWG NO: ES-16-134-CIW

SIZE: B
SCALE: AS NOTED
SHEET: 25/43

REVIEWED FOR SPECIFIED DOOR COMPONENTS ONLY, EXISTING STRUCTURE NOT ANALYZED

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

Guide Construction								CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 50 PSF																				Steel (Wall anchors are the same diameter as assembly fasteners)																
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud-SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)	
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	9	3/8	1 7/8	10	3/8	2 3/8	10	3/8	2 5/8	30	3/8	3 1/4	16	1/2	3 1/2	8	3/8	2	16	1/2	3 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	137	0	135	5'-5"
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	10	3/8	3	9	5/8	3 3/8	12	5/8	4 3/8	17	3/8	3 1/4	12	5/8	4 1/2	16	3/8	3 1/4	12	5/8	4 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	138	0	135	5'-5"
10'-5"	1 1/8	0.281	CP1152	344	10	1/2	18	9	3/4	5 1/2	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	1/2	5 3/4	15	24	9/16" x 3/4"	21	14	7	5	1/4	1051	264	1015	263	10'-5"		
11'-5"	1 3/16	0.344	CP1152	344	9	1/2	18	8	3/4	5 1/2	N/A	N/A	N/A	8	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	1/2	5 3/4	13	21	9/16" x 3/4"	17	12	6	N/A	1/4	1205	289	1175	289	11'-5"			
13'-5"	1 7/16	0.594	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A	N/A	N/A	9	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	18	25	11/16" x 7/8"	34	26	12	8	5/16	1279	337	1257	338	13'-5"			
14'-5"	1 5/8	0.781	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A	N/A	N/A	9	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	19	25	11/16" x 7/8"	34	26	12	8	5/16	1272	361	1254	362	14'-5"				
15'-5"	1 3/4	0.906	CP1152	445	9	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	18	24	11/16" x 7/8"	32	24	11	8	5/16	1347	386	1331	387	15'-5"				
16'-5"	2	1.156	CP1152	445	9	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	18	24	11/16" x 7/8"	33	25	11	8	5/16	1327	410	1315	411	16'-5"				
17'-5"	2	1.156	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	16	21	11/16" x 7/8"	29	21	10	7	5/16	1497	435	1485	436	17'-5"				
18'-5"	2	1.156	CP1152 & CP1153	546	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	13	19	11/16" x 7/8"	24	17	9	6	5/16	1667	460	1655	462	18'-5"				
19'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	21	15	8	5	5/16	1838	486	1826	487	19'-5"					
20'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	2011	511	1998	513	20'-5"					
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	11	6	N/A	5/16	2184	536	2172	538	21'-5"					
22'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	15	10	6	N/A	5/16	2360	562	2347	564	22'-5"					
23'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	12	11/16" x 7/8"	13	8	5	N/A	5/16	2538	588	2525	589	23'-5"					
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	15	17	7/8" x 1"	35	25	12	8	3/8	2245	610	2233	611	24'-5"					
25'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	15	7/8" x 1"	32	23	11	8	3/8	2398	636	2387	636	25'-5"					
26'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	15	7/8" x 1"	30	21	10	7	3/8	2554	661	2542	662	26'-5"					
27'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	14	7/8" x 1"	28	19	10	7	3/8	2712	687	2700	688	27'-5"					
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2872	712	2859	713	28'-5"					
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	12	7/8" x 1"	24	16	9	6	3/8	3033	738	3021	739	29'-5"					

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 50 PSF - Continued																																										
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																										
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To	
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			
5'-5"	333*	N/A			28	2 3/8	4	27	2 3/8	3 3/4	28	2 1/2	4	36	2 1/2	4	27	2 1/4	4	36	3 1/2	4 3/4	36	36	N/A			25	1 7/8	3 1/4	28	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	5'-5"	
5'-5"	344*	N/A			21	2 3/8	4	20	2 3/8	3 3/4	21	2 1/2	4	28	2 1/2	4	20	2 1/4	4	36	3 1/2	4 3/4	36	36	N/A			18	1 7/8	3 1/4	21	2 1/2	4	29	2 1/2	4	30	2 1/2	4	5 3/4	5'-5"	
10'-5"	344	16	3 7/8	6	9	3 5/8	6	10	3 3/4	6	9	3 3/4	5 1/2	19	4 1/4	6 3/4	13	4	6	16	4 1/4	5 1/2	36	34	14	3 7/8	6	N/A			16	3 3/4	5 1/2	11	4 1/4	6 3/4	21	4	6 1/4	5 3/4	10'-5"	
11'-5"	344	10	3 7/8	6	8	3 5/8	6	9	3 3/4	6	8	3 3/4	5 1/2	17	4 1/4	6 3/4	10	4	6	14	4 1/4	5 1/2	36	27	12	3 7/8	6	N/A			9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	11'-5"	
13'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	20	5	7	N/A			21	5	6 1/4	36	36	20	5 1/8	7 7/8	N/A			20	4 1/2	6	N/A			23	5 1/2	8 1/2	6 13/16	13'-5"	
14'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	20	5	7	N/A			21	5	6 1/4	36	36	20	5 1/8	7 7/8	N/A			20	4 1/2	6	N/A			23	5 1/2	8 1/2	6 13/16	14'-5"	
15'-5"	445	19	5 1/8	7 7/8	17	4 1/2	6	16	4 5/8	7	18	4 1/2	6	20	5	7	N/A			20	5	6 1/4	36	36	19	5 1/8	7 7/8	N/A			19	4 1/2	6	N/A			22	5 1/2	8 1/2	6 13/16	15'-5"	
16'-5"	445	19	5 1/8	7 7/8	17	4 1/2	6	16	4 5/8	7	18	4 1/2	6	20	5	7	N/A			20	5	6 1/4	36	36	19	5 1/8	7 7/8	N/A			19	4 1/2	6	N/A			22	5 1/2	8 1/2	6 13/16	16'-5"	
17'-5"	445	18	5 1/8	7 7/8	17	4 1/2	6	11	4 5/8	7	11	4 1/2	6	18	5	7	N/A			18	5	6 1/4	36	36	17	5 1/8	7 7/8	N/A			11	4 1/2	6	N/A			20	5 1/2	8 1/2	6 13/16	17'-5"	
18'-5"	546	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A			16	5	6 1/4	36	36	16	5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			17	5 1/2	8 1/2	6 7/8	18'-5"	
19'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36	31	10	5 1/8	7 7/8	N/A			8	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	19'-5"	
20'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			9	5	6 1/4	36	27	9	5 1/8	7 7/8	N/A			6	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	20'-5"	
21'-5"	546	9	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			6	5	6 1/4	35	24	8	5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	21'-5"	
22'-5"	546	8	5 1/8	7 7/8	N/A			N/A			N/A			7	5	7	N/A			N/A			32	21	N/A			N/A			N/A			N/A			6	5 1/2	8 1/2	6 7/8	22'-5"	
23'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			6	5	7	N/A			N/A			28	18	N/A			N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	23'-5"	
24'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8	N/A			9	5 1/2	8	11	6 1/4	8 1/8	N/A			12	6 5/8	7 7/8	36	36	11	5 3/4	8 3/4	N/A			8	5 1/2	8	N/A			10	6 1/4	10	7 1/2	24'-5"	
25'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	10	6 1/4	8 1/8	N/A			10	6 5/8	7 7/8	36	36	11	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			9	6 1/4	10	7 1/2	25'-5"	
26'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8	N/A			7	5 1/2	8	9	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36	34	10	5 3/4	8 3/4	N/A			6	5 1/2	8	N/A			8	6 1/4	10	7 1/2	26'-5"	
27'-5"	648	8	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			5	6 5/8	7 7/8	36	31	8	5 3/4	8 3/4	N/A			N/A			N/A			7	6 1/4	10	7 1/2	27'-5"	
28'-5"	648	7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	8 1/8	N/A			N/A			36	28	7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	10	7 1/2	28'-5"	
29'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			5	6 1/4	8 1/8	N/A			N/A			36	26	N/A			N/A			N/A			N/A			5	6 1/4	10	7 1/2	29'-5"	

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

Guide Construction								CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 60 PSF																				Steel (Wall anchors are the same diameter as assembly fasteners)																				
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Filled CMU																				Welded						Through Bolt						Tapped Bolt				Superimposed Loads				D.B.G. Up To
								Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)					
Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.														Dia.	Embed	Max O.C.	Dia.	Embed
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	8	3/8	1 7/8	9	3/8	2 3/8	8	3/8	2 5/8	25	3/8	3 1/4	14	1/2	3 1/2	24	3/8	3 1/4	13	1/2	3 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	3/16	0	164	0	163	5'-5"					
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	8	3/8	3	8	5/8	3 3/8	10	5/8	4 3/8	14	3/8	3 1/4	13	3/4	5 1/2	14	3/8	3 1/4	8	3/4	5 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	3/16	0	165	0	163	5'-5"					
11'-5"	1 1/2	0.656	CP1152	DC4	8	1/2	18	5	1/2	3 3/4	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	N/A	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	8	1/2	7 1/4	11	11	9/16" x 3/4"	11	7	11	7	1/4	1171	374	1147	374	11'-5"					
12'-5"	1 5/16	0.469	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 13/16	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	28	20	11/16" x 7/8"	15	20	11/16" x 7/8"	27	19	9	7	5/16	1567	405	1581	405	12'-5"				
13'-5"	1 7/16	0.594	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 13/16	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	27	19	9	7	5/16	1607	405	1581	405	13'-5"										
14'-5"	1 5/8	0.781	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 13/16	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	27	19	9	7	5/16	1588	434	1567	435	14'-5"										
15'-5"	1 3/4	0.906	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 13/16	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	14	19	11/16" x 7/8"	26	18	9	6	5/16	1670	463	1652	465	15'-5"										
16'-5"	2	1.156	CP1152 & CP1153	546	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	14	20	11/16" x 7/8"	25	18	9	6	5/16	1639	492	1625	494	16'-5"										
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	21	15	8	5	5/16	1839	522	1824	524	17'-5"										
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	2038	553	2024	555	18'-5"										
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	16	11	6	N/A	5/16	2240	583	2225	585	19'-5"										
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2443	614	2428	616	20'-5"										
21'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	8	12	11/16" x 7/8"	12	8	5	N/A	5/16	2649	645	2634	647	21'-5"										
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	16	7/8" x 1"	33	24	11	8	3/8	2357	672	2343	673	22'-5"										
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	15	7/8" x 1"	30	21	10	7	3/8	2535	703	2521	703	23'-5"										
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	14	7/8" x 1"	28	19	10	7	3/8	2715	733	2701	734	24'-5"										
25'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7 1/2	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	25	17	9	6	3/8	2898	764	2883	765	25'-5"										
26'-5"	2 9/16	1.719	CP1152 & CP1153	DC6	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7/8" x 1"	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	9 1/4	11	12	7/8" x 1"	24	16	9	6	3/8	3022	794	3009	795	26'-5"										

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 60 PSF - Continued																																																	
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																																	
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To						
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.										
5'-5"	333*	N/A			26	2 3/8	4	25	2 3/8	3 3/4	26	2 1/2	4	34	2 1/2	4	25	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A			22	1 7/8	3 1/4	25	2 1/2	4	35	2 1/2	4	36	2 1/2	4	4 9/16	5'-5"						
5'-5"	344*	N/A			19	2 3/8	4	19	2 3/8	3 3/4	19	2 1/2	4	25	2 1/2	4	17	2 1/4	4	30	3 1/2	4 3/4	36		31		N/A			17	1 7/8	3 1/4	19	2 1/2	4	27	2 1/2	4	27	2 1/2	4	5 3/4	5'-5"						
11'-5"	DC4	10	3 7/8	6	8	3 5/8	6	9	3 3/4	6	8	3 3/4	5 1/2	17	4 1/4	6 3/4	8	4	6	14	4 1/4	5 1/2	34		15		12	3 7/8	6	N/A			9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	11'-5"						
12'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	11	4 5/8	7	11	4 1/2	6	18	5	7	N/A			18	5	6 1/4	36		36		17	5 1/8	7 7/8	N/A			11	4 1/2	6	N/A			19	5 1/2	8 1/2	6 13/16	12'-5"						
13'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A			17	5	6 1/4	36		36		16	5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			19	5 1/2	8 1/2	6 13/16	13'-5"						
14'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A			17	5	6 1/4	36		36		16	5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			19	5 1/2	8 1/2	6 13/16	14'-5"						
15'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7	N/A			13	5	6 1/4	36		35		15	5 1/8	7 7/8	N/A			9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 13/16	15'-5"						
16'-5"	546	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A			16	5	6 1/4	36		36		16	5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			17	5 1/2	8 1/2	6 7/8	16'-5"						
17'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36		31		10	5 1/8	7 7/8	N/A			8	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	17'-5"						
18'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7	N/A			9	5	6 1/4	36		26		9	5 1/8	7 7/8	N/A			6	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	18'-5"						
19'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6	N/A			N/A			8	5	7	N/A			5	5	6 1/4	34		23		7	5 1/8	7 7/8	N/A			N/A			7	5 1/2	8 1/2	6 7/8	19'-5"									
20'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			6	5	7	N/A			N/A			30		19		N/A			N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	20'-5"						
21'-5"	546	5	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			26		17		N/A			N/A			N/A			N/A			N/A			6	7/8	21'-5"					
22'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	10	6 1/4	8 1/8	N/A			10	6 5/8	7 7/8	36		36		11	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			10	6 1/4	10	7 1/2	22'-5"						
23'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8	N/A			7	5 1/2	8	9	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36		34		9	5 3/4	8 3/4	N/A			6	5 1/2	8	N/A			8	6 1/4	10	7 1/2	23'-5"						
24'-5"	648	8	5 3/4	8 3/4	N/A			N/A			5	5 1/2	8	7	6 1/4	8 1/8	N/A			N/A			36		30		8	5 3/4	8 3/4	N/A			N/A			N/A			7	6 1/4	10	7 1/2	24'-5"						
25'-5"	648	7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	8 1/8	N/A			N/A			36		28		7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	10	7 1/2	25'-5"						
26'-5"	DC6	11	5 3/4	8 3/4	9	5 1/2	8	N/A			10	5 1/2	8	10	6 1/4	8 1/8	N/A			12	6 5/8	7 7/8	36		36		11	5 3/4	8 3/4	10	4 1/2	6	9	5 1/2	8	N/A			10	6 1/4	10	9 1/4	26'-5"						

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CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 65 PSF																																												
Guide Construction								Filled CMU																		Steel (Wall anchors are the same diameter as assembly fasteners)																		
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)	
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	13	3/8	3	8	3/8	2 3/8	8	3/8	2 5/8	23	3/8	3 1/4	12	1/2	3 1/2	22	3/8	3 1/4	12	1/2	3 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	178	0	176	5'-5"
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	8	1/2	3 3/4	N/A	3/8	9	5/8	4 3/8	13	3/8	3 1/4	12	3/4	5 1/2	13	3/8	3 1/4	8	3/4	5 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	179	0	176	5'-5"	
11'-5"	1 1/2	0.656	CP1152	DC4	8	1/2	18	5	1/2	3 3/4	N/A	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	8	1/2	7 1/4	11	11	9/16" x 3/4"	11	11	7	11	7	1/4	1171	374	1147	374	11'-5"	
12'-5"	1 5/16	0.469	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	14	18	11/16" x 7/8"	25	17	9	6	5/16	1724	407	1692	408	12'-5"				
13'-5"	1 7/16	0.594	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	13	18	11/16" x 7/8"	24	17	8	6	5/16	1770	439	1743	440	13'-5"					
14'-5"	1 5/8	0.781	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	13	18	11/16" x 7/8"	24	17	9	6	5/16	1746	470	1723	472	14'-5"					
15'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	18	11/16" x 7/8"	22	15	8	5	5/16	1832	502	1812	504	15'-5"					
16'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	18	11/16" x 7/8"	22	15	8	6	5/16	1796	533	1780	535	16'-5"					
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	2009	566	1994	568	17'-5"						
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	16	11	6	N/A	5/16	2224	599	2208	601	18'-5"						
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2440	632	2425	634	19'-5"						
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	8	12	11/16" x 7/8"	12	8	5	N/A	5/16	2659	665	2643	668	20'-5"						
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	16	7/8" x 1"	32	23	11	8	3/8	2374	695	2359	696	21'-5"						
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	14	7/8" x 1"	30	21	10	7	3/8	2563	728	2549	729	22'-5"						
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	27	19	10	7	3/8	2755	761	2740	762	23'-5"						
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	12	7/8" x 1"	25	17	9	6	3/8	2950	795	2935	796	24'-5"						

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 65 PSF - Continued																																												
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																												
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To			
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.					
5'-5"	333*	N/A			25	2 3/8	4	24	2 3/8	3 3/4	25	2 1/2	4	32	2 1/2	4	24	2 1/4	4	36	3 1/2	4 3/4	36	36	N/A			21	1 7/8	3 1/4	24	2 1/2	4	34	2 1/2	4	35	2 1/2	4	4 9/16	5'-5"			
5'-5"	344*	N/A			19	2 3/8	4	18	2 3/8	3 3/4	19	2 1/2	4	24	2 1/2	4	16	2 1/4	4	27	3 1/2	4 3/4	36	29	N/A			16	1 7/8	3 1/4	18	2 1/2	4	26	2 1/2	4	26	2 1/2	4	5 3/4	5'-5"			
11'-5"	DC4	10	3 7/8	6	8	3 5/8	6	9	3 3/4	6	8	3 3/4	5 1/2	17	4 1/4	6 3/4	8	4	6	14	4 1/4	5 1/2	34	15	12	3 7/8	6	N/A			9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	11'-5"			
12'-5"	445	17	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7	N/A			13	5	6 1/4	36	36	11	5 1/8	7 7/8	N/A			9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 13/16	12'-5"			
13'-5"	445	16	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36	34	11	5 1/8	7 7/8	N/A			9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 13/16	13'-5"			
14'-5"	445	16	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36	34	11	5 1/8	7 7/8	N/A			9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 13/16	14'-5"			
15'-5"	546	15	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36	32	11	5 1/8	7 7/8	N/A			8	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	15'-5"			
16'-5"	546	15	5 1/8	7 7/8	9	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36	31	11	5 1/8	7 7/8	N/A			8	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	16'-5"			
17'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7	N/A			9	5	6 1/4	36	27	9	5 1/8	7 7/8	N/A			6	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	17'-5"			
18'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6	N/A			5	4 1/2	6	8	5	7	N/A			5	5	6 1/4	34	23	7	5 1/8	7 7/8	N/A			N/A			7	5 1/2	8 1/2	6 7/8	18'-5"						
19'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			6	5	7	N/A			N/A			30	19	N/A			N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	19'-5"			
20'-5"	546	5	5 1/8	7 7/8	N/A			N/A			N/A			N/A			N/A			N/A			26	17	N/A			N/A			N/A			N/A			N/A			6 7/8	20'-5"			
21'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	10	6 1/4	8 1/8	N/A			10	6 5/8	7 7/8	36	36	10	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			9	6 1/4	10	7 1/2	21'-5"			
22'-5"	648	9	5 3/4	8 3/4	N/A			N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36	33	9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	22'-5"
23'-5"	648	7	5 3/4	8 3/4	N/A			N/A			N/A			5	5 1/2	8	7	6 1/4	8 1/8	N/A			N/A			36	30	8	5 3/4	8 3/4	N/A			N/A			7	6 1/4	10	7 1/2	23'-5"			
24'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			N/A			6	6 1/4	8 1/8	N/A			N/A			36	27	7	5 3/4	8 3/4	N/A			N/A			6	6 1/4	10	7 1/2	24'-5"			

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CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 70 PSF																																												
Guide Construction								Filled CMU														Steel (Wall anchors are the same diameter as assembly fasteners)																						
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)	
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	8	3/8	1 7/8	9	3/8	2 3/8	9	3/8	2 5/8	26	3/8	3 1/4	14	1/2	3 1/2	26	3/8	3 1/4	14	1/2	3 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	157	0	155	4'-5"
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	8	3/8	3	8	5/8	3 3/8	10	5/8	4 3/8	15	3/8	3 1/4	14	3/4	5 1/2	14	3/8	3 1/4	9	3/4	5 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	158	0	155	4'-5"
11'-5"	1 3/16	0.344	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	12	17	11/16" x 7/8"	22	15	8	6	5/16	1893	404	1852	406	11'-5"	
12'-5"	1 5/16	0.469	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	12	17	11/16" x 7/8"	22	15	8	6	5/16	1889	438	1855	440	12'-5"	
13'-5"	1 7/16	0.594	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	20	14	7	5	5/16	1934	473	1905	475	13'-5"	
14'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	20	14	7	5	5/16	1904	506	1880	508	14'-5"	
15'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	1994	541	1972	543	15'-5"	
16'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	20	14	7	5	5/16	1952	574	1936	576	16'-5"	
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	11	6	N/A	5/16	2180	610	2163	612	17'-5"	
18'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2409	645	2393	648	18'-5"	
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	8	12	11/16" x 7/8"	12	8	5	N/A	5/16	2641	681	2624	683	19'-5"	
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	16	7/8" x 1"	33	23	11	8	3/8	2367	713	2351	714	20'-5"	
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	14	7/8" x 1"	30	21	10	7	3/8	2567	749	2551	750	21'-5"	
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	27	19	9	7	3/8	2770	785	2754	786	22'-5"	
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	12	7/8" x 1"	24	17	9	6	3/8	2976	820	2960	821	23'-5"	

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 70 PSF - Continued																																														
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																														
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To			
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.									
4'-5"	333*	N/A			26	2 3/8	4	25	2 3/8	3 3/4	27	2 1/2	4	35	2 1/2	4	25	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A			23	1 7/8	3 1/4	26	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	4'-5"			
4'-5"	344*	N/A			20	2 3/8	4	19	2 3/8	3 3/4	20	2 1/2	4	26	2 1/2	4	18	2 1/4	4	31	3 1/2	4 3/4	36		33		N/A			17	1 7/8	3 1/4	20	2 1/2	4	27	2 1/2	4	28	2 1/2	4	5 3/4	4'-5"			
11'-5"	445	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	10	5	7	N/A			11	5	6 1/4	36		32		10	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			10	5 1/2	8 1/2	6 13/16	11'-5"			
12'-5"	445	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	10	5	7	N/A			11	5	6 1/4	36		31		10	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			10	5 1/2	8 1/2	6 13/16	12'-5"			
13'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			11	5	6 1/4	36		30		10	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	13'-5"			
14'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	10	5	7	N/A			11	5	6 1/4	36		30		10	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	14'-5"			
15'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			9	5	6 1/4	36		28		9	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	15'-5"			
16'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			10	5	6 1/4	36		28		9	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	16'-5"			
17'-5"	546	9	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			6	5	6 1/4	35		23		8	5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			7	5 1/2	8 1/2	6 7/8	17'-5"			
18'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			6	5	7	N/A			N/A			30		20		N/A			N/A			N/A			N/A			6	5 1/2	8 1/2	6 7/8	18'-5"			
19'-5"	546	5	5 1/8	7 7/8	N/A			N/A			N/A			N/A			N/A			N/A			26		17		N/A			N/A			N/A			N/A			N/A			6	5 1/2	8 1/2	6 7/8	19'-5"
20'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	10	6 1/4	8 1/8	N/A			10	6 5/8	7 7/8	36		36		10	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			9	6 1/4	10	7 1/2	20'-5"			
21'-5"	648	9	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36		33		9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	21'-5"			
22'-5"	648	7	5 3/4	8 3/4	N/A			N/A			5	5 1/2	8	7	6 1/4	8 1/8	N/A			N/A			36		29		8	5 3/4	8 3/4	N/A			N/A			N/A			7	6 1/4	10	7 1/2	22'-5"			
23'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			5	6 1/4	8 1/8	N/A			N/A			36		26		7	5 3/4	8 3/4	N/A			N/A			N/A			5	6 1/4	10	7 1/2	23'-5"			

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CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 90 PSF - Continued																																										
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																										
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To	
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			
4'-5"	333*	N/A			23	2 3/8	4	22	2 3/8	3 3/4	23	2 1/2	4	31	2 1/2	4	22	2 1/4	4	36	3 1/2	4 3/4	36		36	N/A			20	1 7/8	3 1/4	23	2 1/2	4	32	2 1/2	4	33	2 1/2	4	4 9/16	4'-5"
4'-5"	344*	N/A			17	2 3/8	4	17	2 3/8	3 3/4	18	2 1/2	4	23	2 1/2	4	14	2 1/4	4	24	3 1/2	4 3/4	33		25	N/A			15	1 7/8	3 1/4	17	2 1/2	4	24	2 1/2	4	24	2 1/2	4	5 3/4	4'-5"
10'-5"	546	8	5 1/8	7 7/8	N/A			N/A			N/A			7	5	7	N/A			N/A			34		23	N/A			N/A			N/A			6	5 1/2	8 1/2	6 7/8	10'-5"			
11'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			30		19	N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	11'-5"			
12'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			30		19	N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	12'-5"			
13'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			29		18	N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	13'-5"			
14'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			29		19	N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	14'-5"			
15'-5"	546	5	5 1/8	7 7/8	N/A			N/A			N/A			N/A			N/A			N/A			27		17	N/A			N/A			N/A			N/A			6 7/8	15'-5"			
16'-5"	648	9	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36		33	9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	16'-5"
17'-5"	648	9	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			6	6 5/8	7 7/8	36		33	9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	17'-5"
18'-5"	648	8	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			6	6 5/8	7 7/8	36		32	9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	18'-5"
19'-5"	648	7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	8 1/8	N/A			N/A			36		28	7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	10	7 1/2	19'-5"

Guide Construction								CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 100 PSF																								Steel (Wall anchors are the same diameter as assembly fasteners)																				
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Filled CMU																								Welded						Through Bolt						Tapped Bolt				Superimposed Loads				D.B.G. Up To
								Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud-SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance																					
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)									
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	10	3/8	3	10	5/8	3 3/8	13	5/8	4 3/8	18	3/8	3 1/4	13	5/8	4 1/2	18	3/8	3 1/4	13	5/8	4 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	224	0	221	4'-5"								
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	8	5/8	4 1/2	N/A			8	3/4	5 1/4	10	3/8	3 1/4	N/A			10	3/8	3 1/4	N/A			8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	225	0	221	4'-5"								
10'-5"	1 1/8	0.281	CP1152 & CP1153	546	6	5/8	13	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	8	11	1 1/16" x 7/8"	12	7	5	N/A	5/16	2709	530	2646	533	10'-5"								
15'-5"	1 3/4	0.906	CP1152 & CP1153	648	6	3/4	15	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	11	12	7/8" x 1"	24	17	9	6	3/8	2978	777	2937	778	15'-5"								
16'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	15	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	11	13	7/8" x 1"	25	17	9	6	3/8	2903	824	2870	825	16'-5"								
17'-5"	2 1/4	1.406	CP1152 & CP1153	648	6	3/4	14	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	12	13	7/8" x 1"	25	17	9	6	3/8	2884	871	2857	873	17'-5"								
18'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	11	13	7/8" x 1"	25	17	9	6	3/8	2897	919	2876	920	18'-5"								

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 100 PSF - Continued																																												
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																												
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To			
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.							
4'-5"	333*	N/A			22	2 3/8	4	21	2 3/8	3 3/4	22	2 1/2	4	29	2 1/2	4	21	2 1/4	4	36	3 1/2	4 3/4	36	36	N/A			19	1 7/8	3 1/4	22	2 1/2	4	30	2 1/2	4	31	2 1/2	4	4 9/16	4'-5"			
4'-5"	344*	N/A			17	2 3/8	4	16	2 3/8	3 3/4	17	2 1/2	4	22	2 1/2	4	12	2 1/4	4	22	3 1/2	4 3/4	29	23	N/A			14	1 7/8	3 1/4	16	2 1/2	4	23	2 1/2	4	23	2 1/2	4	5 3/4	4'-5"			
10'-5"	546	5	5 1/8	7 7/8	N/A			N/A			N/A			N/A			N/A			N/A			N/A			28	18	N/A			N/A			N/A			N/A			N/A			6 7/8	10'-5"
15'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			6 6 1/4			8 1/8	N/A			N/A			36			28	7	5 3/4	8 3/4	N/A			N/A			N/A			6 6 1/4	10	7 1/2	15'-5"	
16'-5"	648	7	5 3/4	8 3/4	N/A			N/A			N/A			6 6 1/4			8 1/8	N/A			N/A			36			28	7	5 3/4	8 3/4	N/A			N/A			N/A			6 6 1/4	10	7 1/2	16'-5"	
17'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			6 6 1/4			8 1/8	N/A			N/A			36			28	7	5 3/4	8 3/4	N/A			N/A			N/A			6 6 1/4	10	7 1/2	17'-5"	
18'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			6 6 1/4			8 1/8	N/A			N/A			36			27	7	5 3/4	8 3/4	N/A			N/A			N/A			6 6 1/4	10	7 1/2	18'-5"	

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CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 20 PSF																																												
Guide Construction								Filled CMU																Steel (Wall anchors are the same diameter as assembly fasteners)																				
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud-SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Embed	Max O.C.	Dia.	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	
11'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	11	3/8	1 7/8	13	3/8	2 3/8	12	3/8	2 5/8	8	3/8	1 5/8	14	3/8	2 3/4	9	3/8	2	12	3/8	2 3/4	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	115	0	114	11'-5"
11'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	12	3/8	3	8	1/2	2 1/2	8	1/2	3 1/2	20	3/8	3 1/4	15	5/8	4 1/2	20	3/8	3 1/4	15	5/8	4 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	51	125	38	124	11'-5"
12'-5"	1 5/16	0.532	CP1151	333	12	3/8	18	10	3/8	1 7/8	9	3/8	2 3/8	9	3/8	2 5/8	8	3/8	1 5/8	14	1/2	3 1/2	8	3/8	2	14	1/2	3 1/2	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	51	125	38	124	12'-5"
12'-5"	1 5/16	0.532	CP1151	344	12	1/2	18	18	1/2	3 3/4	10	1/2	2 1/2	10	1/2	3 1/2	36	1/2	4 1/4	13	1/2	3 1/2	36	1/2	4 1/4	13	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	36	36	1/4	55	125	38	124	12'-5"
13'-5"	1 7/16	0.657	CP1151	333	12	3/8	18	10	3/8	1 7/8	13	3/8	2 3/8	13	3/8	2 5/8	8	3/8	1 5/8	14	3/8	2 3/4	8	3/8	2	12	3/8	2 3/4	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	33	27	3/16	137	135	126	134	13'-5"
13'-5"	1 7/16	0.657	CP1151	344	12	1/2	18	24	1/2	3 3/4	15	1/2	2 1/2	15	1/2	3 1/2	36	1/2	4 1/4	19	1/2	3 1/2	36	1/2	4 1/4	18	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	36	36	1/4	140	135	126	134	13'-5"
14'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	11	3/8	3	8	3/8	2 3/8	8	3/8	2 5/8	21	3/8	3 1/4	12	1/2	3 1/2	21	3/8	3 1/4	11	1/2	3 1/2	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	18	15	3/16	240	145	230	144	14'-5"
14'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	17	1/2	3 3/4	12	1/2	2 1/2	12	1/2	3 1/2	36	1/2	4 1/4	15	1/2	3 1/2	36	1/2	4 1/4	13	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	31	22	1/4	242	145	230	144	14'-5"
15'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	10	1/2	3 3/4	9	5/8	3 3/8	11	5/8	4 3/8	15	3/8	3 1/4	14	3/4	5 1/2	15	3/8	3 1/4	N/A		8	3/8	5 3/16	34	36	7/16" x 5/8"	34	26	12	10	3/16	361	154	352	154	15'-5"	
15'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	12	1/2	3 3/4	8	1/2	2 1/2	8	1/2	3 1/2	29	1/2	4 1/4	14	5/8	4 1/2	27	1/2	4 1/4	10	5/8	4 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	21	15	1/4	363	155	352	154	15'-5"
16'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	8	1/2	3 3/4	N/A		8	5/8	4 3/8	11	3/8	3 1/4	N/A		10	3/8	3 1/4	N/A		8	3/8	5 3/16	26	36	7/16" x 5/8"	26	19	9	7	3/16	475	164	466	165	16'-5"			
16'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	9	1/2	3 3/4	8	5/8	3 3/8	10	5/8	4 3/8	23	1/2	4 1/4	14	3/4	5 1/2	21	1/2	4 1/4	N/A		8	1/2	5 3/4	33	36	9/16" x 3/4"	36	35	16	12	1/4	476	165	466	165	16'-5"	
17'-5"	1 1/2	0.719	CP1151	333	12	3/8	15	8	5/8	4 1/2	N/A		8	3/4	5 1/4	8	3/8	3 1/4	N/A		12	1/2	4 1/4	N/A		8	3/8	5 3/16	21	33	7/16" x 5/8"	20	14	7	6	3/16	583	174	575	175	17'-5"			
17'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	8	1/2	3 3/4	N/A		8	5/8	4 3/8	19	1/2	4 1/4	N/A		16	1/2	4 1/4	N/A		8	1/2	5 3/4	27	36	9/16" x 3/4"	36	29	13	9	1/4	585	175	575	175	17'-5"			
18'-5"	1 1/2	0.719	CP1151	334	12	3/8	13	8	5/8	4 1/2	N/A		N/A		13	1/2	4 1/4	N/A		11	1/2	4 1/4	N/A		8	3/8	5 7/16	18	28	7/16" x 5/8"	16	11	6	5	3/16	688	185	681	185	18'-5"				
18'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	8	5/8	4 1/2	N/A		8	3/4	5 1/4	15	1/2	4 1/4	N/A		12	1/2	4 1/4	N/A		8	1/2	5 3/4	23	36	9/16" x 3/4"	32	25	11	8	1/4	690	185	681	185	18'-5"			
19'-5"	1 1/2	0.719	CP1151	334	11	3/8	12	12	3/4	5 1/2	N/A		N/A		10	1/2	4 1/4	N/A		9	1/2	4 1/4	N/A		8	3/8	5 7/16	16	25	7/16" x 5/8"	13	9	5	N/A		3/16	791	195	784	195	19'-5"			
19'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	13	3/4	5 1/2	N/A		N/A		12	1/2	4 1/4	N/A		10	1/2	4 1/4	N/A		8	1/2	5 3/4	20	33	9/16" x 3/4"	28	21	10	7	1/4	792	195	784	195	19'-5"				
20'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	11	3/4	5 1/2	N/A		N/A		9	1/2	4 1/4	N/A		8	1/2	4 1/4	N/A		8	1/2	5 3/4	17	27	9/16" x 3/4"	23	17	8	6	1/4	946	205	937	205	20'-5"				
21'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	10	3/4	5 1/2	N/A		N/A		8	1/2	4 1/4	N/A		N/A		N/A		8	1/2	5 3/4	15	25	9/16" x 3/4"	21	14	7	5	1/4	1050	215	1042	215	21'-5"					
22'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	8	3/4	5 1/2	N/A		N/A		9	3/4	6 1/4	N/A		N/A		N/A		8	1/2	5 3/4	14	22	9/16" x 3/4"	18	13	7	5	1/4	1153	225	1145	226	22'-5"					
23'-5"	2	1.156	CP1152	445	10	5/8	18	12	3/4	5 1/2	N/A		N/A		10	5/8	5	N/A		N/A		N/A		8	5/8	6 13/16	26	36	11/16" x 7/8"	36	36	17	12	5/16	904	234	899	234	23'-5"					
24'-5"	2	1.156	CP1152	445	10	5/8	18	11	3/4	5 1/2	N/A		N/A		9	5/8	5	N/A		N/A		N/A		8	5/8	6 13/16	24	33	11/16" x 7/8"	36	34	16	11	5/16	985	244	980	245	24'-5"					
25'-5"	2	1.156	CP1152	445	10	5/8	18	10	3/4	5 1/2	N/A		N/A		8	5/8	5	N/A		N/A		N/A		8	5/8	6 13/16	22	30	11/16" x 7/8"	36	32	14	10	5/16	1066	254	1061	255	25'-5"					
26'-5"	2	1.156	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A		N/A		10	3/4	6 1/4	N/A		N/A		N/A		8	5/8	6 13/16	21	28	11/16" x 7/8"	36	29	13	9	5/16	1148	264	1142	265	26'-5"					
27'-5"	2	1.156	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A		N/A		9	3/4	6 1/4	N/A		N/A		N/A		8	5/8	6 13/16	19	26	11/16" x 7/8"	35	27	12	9	5/16	1229	274	1223	275	27'-5"					
28'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A		N/A		8	3/4	6 1/4	N/A		N/A		N/A		8	5/8	6 13/16	18	25	11/16" x 7/8"	33	25	12	8	5/16	1311	284	1305	285	28'-5"					
29'-5"	2	1.156	CP1152	445	8	5/8	18	N/A		N/A		N/A		8	3/4	6 1/4	N/A		N/A		N/A		N/A		8	5/8	6 13/16	17	23	11/16" x 7/8"	31	23	11	8	5/16	1393	294	1387	295	29'-5"				
30'-5"	2	1.156	CP1152	445	8	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	16	22	11/16" x 7/8"	29	22	10	7	5/16	1476	305	1470	305	30'-5"					
31'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	15	21	11/16" x 7/8"	28	20	10	7	5/16	1560	315	1554	315	31'-5"					
32'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	14	20	11/16" x 7/8"	26	18	9	6	5/16	1644	325	1638	326	32'-5"					
33'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	14	19	11/16" x 7/8"	24	17	9	6	5/16	1729	335	1723	336	33'-5"					
34'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	13	18	11/16" x 7/8"	23	16	8	6	5/16	1815	345	1808	346	34'-5"					
35'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	12	17	11/16" x 7/8"	20	14	7	5	5/16	1901	355	1895	356	35'-5"					
36'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	1989	366	1982	366	36'-5"					

REVIEWED FOR SPECIFIED DOOR COMPONENTS ONLY, EXISTING STRUCTURE NOT ANALYZEDA circular professional engineer seal for Shawn Patrick Kelley, License No. 58299, State of Florida. The seal features the text "SHAWN PATRICK KELLEY" at the top, "LICENSE" in the center, "No 58299" below it, "STATE OF FLORIDA" at the bottom, and "PROFESSIONAL ENGINEER" around the perimeter. A green signature is written across the seal.

	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are: 0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG		
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM				
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT IMPACT RATED		DRAWN BY:	SIZE:	SCALE:	SHEET:
		KAD	B	AS NOTED	33/43
		DWG NO: ES-16-134-CIW			

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

Guide Construction								Filled CMU																				Steel (Wall anchors are the same diameter as assembly fasteners)																
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud-SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Embed	Max O.C.	Dia.	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	
9'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	9	3/8	1 7/8	10	3/8	2 3/8	10	3/8	2 5/8	29	3/8	3 1/4	16	1/2	3 1/2	28	3/8	3 1/4	15	1/2	3 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	3/16	0	142	0	141	9'-5"	
9'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	9	3/8	3	9	5/8	3 3/8	11	5/8	4 3/8	16	3/8	3 1/4	12	5/8	4 1/2	16	3/8	3 1/4	12	5/8	4 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	3/16	0	143	0	141	9'-5"	
10'-5"	1 1/16	0.282	CP1151	333	12	3/8	18	11	3/8	3	11	3/8	2 3/8	11	3/8	2 5/8	23	3/8	3 1/4	12	3/8	2 3/4	22	3/8	3 1/4	10	3/8	2 3/4	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	25	21	3/16	178	157	151	157	10'-5"
10'-5"	1 1/16	0.282	CP1151	344	12	1/2	18	18	1/2	3 3/4	14	1/2	2 1/2	15	1/2	3 1/2	36	1/2	4 1/4	18	1/2	3 1/2	36	1/2	4 1/4	16	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	36	29	1/4	184	158	151	157	10'-5"
11'-5"	1 3/16	0.407	CP1151	333	12	3/8	18	9	3/8	3	8	3/8	2 3/8	8	3/8	2 5/8	18	3/8	3 1/4	15	5/8	4 1/2	18	3/8	3 1/4	11	5/8	4 1/2	8	3/8	5 3/16	36	36	7/16" x 5/8"	36	36	17	14	3/16	265	172	245	172	11'-5"
11'-5"	1 3/16	0.407	CP1151	344	12	1/2	18	14	1/2	3 3/4	11	1/2	2 1/2	11	1/2	3 1/2	34	1/2	4 1/4	14	1/2	3 1/2	32	1/2	4 1/4	12	1/2	3 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	28	20	1/4	270	172	245	172	11'-5"
12'-5"	1 5/16	0.532	CP1151	333	12	3/8	18	9	1/2	3 3/4	9	5/8	3 3/8	11	5/8	4 3/8	14	3/8	3 1/4	14	3/4	5 1/2	14	3/8	3 1/4	N/A		8	3/8	5 3/16	34	36	7/16" x 5/8"	34	26	12	10	3/16	358	187	341	187	12'-5"	
12'-5"	1 5/16	0.532	CP1151	344	12	1/2	18	11	1/2	3 3/4	8	1/2	2 1/2	8	1/2	3 1/2	27	1/2	4 1/4	14	5/8	4 1/2	26	1/2	4 1/4	10	5/8	4 1/2	8	1/2	5 3/4	36	36	9/16" x 3/4"	36	36	21	15	1/4	362	187	341	187	12'-5"
13'-5"	1 7/16	0.657	CP1151	333	12	3/8	17	8	1/2	3 3/4	N/A		9	5/8	4 3/8	11	3/8	3 1/4	N/A		11	3/8	3 1/4	N/A		8	3/8	5 3/16	28	36	7/16" x 5/8"	27	21	10	8	3/16	446	202	432	202	13'-5"			
13'-5"	1 7/16	0.657	CP1151	344	12	1/2	18	9	1/2	3 3/4	9	5/8	3 3/8	10	5/8	4 3/8	23	1/2	4 1/4	14	3/4	5 1/2	21	1/2	4 1/4	N/A		8	1/2	5 3/4	35	36	9/16" x 3/4"	36	36	17	12	1/4	449	202	432	202	13'-5"	
14'-5"	1 1/2	0.719	CP1151	333	12	3/8	14	8	5/8	4 1/2	N/A		8	3/4	5 1/4	8	3/8	3 1/4	N/A		12	1/2	4 1/4	N/A		8	3/8	5 3/16	22	34	7/16" x 5/8"	21	15	7	6	3/16	568	217	556	217	14'-5"			
14'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	8	1/2	3 3/4	N/A		8	5/8	4 3/8	18	1/2	4 1/4	N/A		15	1/2	4 1/4	N/A		8	1/2	5 3/4	28	36	9/16" x 3/4"	36	29	13	9	1/4	570	217	556	217	14'-5"			
15'-5"	1 1/2	0.719	CP1151	334	12	3/8	12	12	3/4	5 1/2	N/A		N/A		12	1/2	4 1/4	N/A		9	1/2	4 1/4	N/A		8	3/8	5 7/16	17	27	7/16" x 5/8"	15	10	6	5	3/16	723	232	711	232	15'-5"				
15'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	8	5/8	4 1/2	N/A		N/A		13	1/2	4 1/4	N/A		11	1/2	4 1/4	N/A		8	1/2	5 3/4	22	35	9/16" x 3/4"	30	23	10	7	1/4	725	232	711	232	15'-5"				
16'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	11	3/4	5 1/2	N/A		N/A		9	1/2	4 1/4	N/A		8	1/2	4 1/4	N/A		8	1/2	5 3/4	17	28	9/16" x 3/4"	23	17	8	6	1/4	931	247	918	248	16'-5"				
17'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	9	3/4	5 1/2	N/A		N/A		8	1/2	4 1/4	N/A		N/A		8	1/2	5 3/4	N/A		8	1/2	5 3/4	15	24	9/16" x 3/4"	20	14	7	5	1/4	1081	263	1069	263	17'-5"		
18'-5"	2	1.219	CP1151	445	11	5/8	18	13	3/4	5 1/2	N/A		N/A		10	5/8	5	N/A		N/A		N/A		N/A		8	5/8	6 13/16	29	36	11/16" x 7/8"	36	36	19	13	5/16	828	275	820	276	18'-5"			
19'-5"	2	1.156	CP1152	445	10	5/8	18	11	3/4	5 1/2	N/A		N/A		9	5/8	5	N/A		N/A		N/A		N/A		8	5/8	6 13/16	24	33	11/16" x 7/8"	36	35	16	11	5/16	975	291	967	292	19'-5"			
20'-5"	2	1.156	CP1152	445	10	5/8	18	10	3/4	5 1/2	N/A		N/A		8	5/8	5	N/A		N/A		N/A		N/A		8	5/8	6 13/16	22	30	11/16" x 7/8"	36	31	14	10	5/16	1091	306	1083	307	20'-5"			
21'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A		N/A		9	3/4	6 1/4	N/A		N/A		N/A		N/A		8	5/8	6 13/16	20	27	11/16" x 7/8"	36	28	13	9	5/16	1206	321	1198	322	21'-5"			
22'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A		N/A		8	3/4	6 1/4	N/A		N/A		N/A		N/A		8	5/8	6 13/16	18	24	11/16" x 7/8"	33	25	11	8	5/16	1321	336	1312	337	22'-5"			
23'-5"	2	1.156	CP1152	445	8	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	16	22	11/16" x 7/8"	30	22	10	7	5/16	1435	351	1427	352	23'-5"			
24'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	15	21	11/16" x 7/8"	28	20	10	7	5/16	1551	366	1542	367	24'-5"			
25'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 13/16	14	19	11/16" x 7/8"	26	18	9	6	5/16	1666	381	1658	382	25'-5"			
26'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	13	18	11/16" x 7/8"	22	16	8	6	5/16	1783	397	1775	398	26'-5"			
27'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	12	17	11/16" x 7/8"	20	14	7	5	5/16	1901	412	1892	413	27'-5"			
28'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	2019	427	2011	428	28'-5"			
29'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	10	15	11/16" x 7/8"	17	12	7	5	5/16	2139	443	2131	444	29'-5"			
30'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	10	14	11/16" x 7/8"	16	11	6	N/A	5/16	2260	458	2252	459	30'-5"			
31'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	9	13	11/16" x 7/8"	15	10	6	N/A	5/16	2383	473	2374	474	31'-5"			
32'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	5	N/A	5/16	2506	489	2498	490	32'-5"			
33'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	5/8	6 7/8	8	12	11/16" x 7/8"	12	8	5	N/A	5/16	2632	504	2623	505	33'-5"			
34'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	3/4	7 1/2	15	16	7/8" x 1"	34	25	12	8	3/8	2286	517	2278	517	34'-5"			
35'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	3/4	7 1/2	14	16	7/8" x 1"	33	23	11	8	3/8	2393	532	2385	533	35'-5"			
36'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	3/4	7 1/2	14	15	7/8" x 1"	31	22	11	8	3/8	2502	548	2494	548	36'-5"			
37'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		8	3/4	7 1/2	13	14	7/8" x 1"	29	21	10	7	3/8	2611	563	2603	563	37'-5"			
38'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A																						

L/TR	REVISION	DATE	BY	E.C.O.
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CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 30 PSF - Continued																																														
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																														
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To					
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.							
9'-5"	333*		N/A		28	2 3/8	4	27	2 3/8	3 3/4	28	2 1/2	4	36	2 1/2	4	27	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A		24	1 7/8	3 1/4	27	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	9'-5"				
9'-5"	344*		N/A		21	2 3/8	4	20	2 3/8	3 3/4	21	2 1/2	4	27	2 1/2	4	20	2 1/4	4	34	3 1/2	4 3/4	36		36		N/A		18	1 7/8	3 1/4	20	2 1/2	4	29	2 1/2	4	29	2 1/2	4	5 3/4	9'-5"				
10'-5"	333		N/A		22	2 3/8	4	22	2 3/8	3 3/4	23	2 1/2	4	29	2 1/2	4	22	2 1/4	4	34	3 1/2	4 3/4	36		36		N/A		17	1 7/8	3 1/4	23	2 1/2	4	32	2 1/2	4	32	2 1/2	4	5 3/16	10'-5"				
10'-5"	344	36	3 7/8	6	35	3 5/8	6	33	3 3/4	6	36	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6	36	4 1/4	5 1/2	36		36	36	3 7/8	6	29	2 1/2	4	36	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6 1/4	5 3/4	10'-5"				
11'-5"	333		N/A		19	2 3/8	4	19	2 3/8	3 3/4	20	2 1/2	4	25	2 1/2	4	18	2 1/4	4	27	3 1/2	4 3/4	36		36		N/A		14	1 7/8	3 1/4	20	2 1/2	4	27	2 1/2	4	27	2 1/2	4	5 3/16	11'-5"				
11'-5"	344	34	3 7/8	6	30	3 5/8	6	29	3 3/4	6	32	3 3/4	5 1/2	36	4 1/4	6 3/4	31	4	6	36	4 1/4	5 1/2	36		36	34	3 7/8	6	25	2 1/2	4	33	3 3/4	5 1/2	36	4 1/4	6 3/4	36	4	6 1/4	5 3/4	11'-5"				
12'-5"	333		N/A		16	2 3/8	4	17	2 3/8	3 3/4	18	2 1/2	4	22	2 1/2	4	15	2 1/4	4	22	3 1/2	4 3/4	36		36		N/A		12	1 7/8	3 1/4	17	2 1/2	4	24	2 1/2	4	24	2 1/2	4	5 3/16	12'-5"				
12'-5"	344	30	3 7/8	6	27	3 5/8	6	25	3 3/4	6	29	3 3/4	5 1/2	34	4 1/4	6 3/4	27	4	6	36	4 1/4	5 1/2	36		36	30	3 7/8	6	22	2 1/2	4	29	3 3/4	5 1/2	33	4 1/4	6 3/4	36	4	6 1/4	5 3/4	12'-5"				
13'-5"	333		N/A		14	2 3/8	4	14	2 3/8	3 3/4	16	2 1/2	4	20	2 1/2	4	12	2 1/4	4	18	3 1/2	4 3/4	36		33		N/A		9	1 7/8	3 1/4	16	2 1/2	4	21	2 1/2	4	21	2 1/2	4	5 3/16	13'-5"				
13'-5"	344	27	3 7/8	6	24	3 5/8	6	22	3 3/4	6	26	3 3/4	5 1/2	31	4 1/4	6 3/4	25	4	6	36	4 1/4	5 1/2	36		36	27	3 7/8	6	19	2 1/2	4	26	3 3/4	5 1/2	29	4 1/4	6 3/4	34	4	6 1/4	5 3/4	13'-5"				
14'-5"	333		N/A		11	2 3/8	4	12	2 3/8	3 3/4	14	2 1/2	4	17	2 1/2	4	10	2 1/4	4	15	3 1/2	4 3/4	34		24		N/A		6	1 7/8	3 1/4	14	2 1/2	4	16	2 1/2	4	18	2 1/2	4	5 3/16	14'-5"				
14'-5"	344	24	3 7/8	6	21	3 5/8	6	20	3 3/4	6	23	3 3/4	5 1/2	27	4 1/4	6 3/4	22	4	6	29	4 1/4	5 1/2	36		36	24	3 7/8	6	16	2 1/2	4	23	3 3/4	5 1/2	25	4 1/4	6 3/4	30	4	6 1/4	5 3/4	14'-5"				
15'-5"	334		N/A		10	2 3/8	4	5	2 3/8	4	12	2 1/2	4	15	2 1/2	4	5	2 1/4	4	13	3 1/2	4 3/4	28		19		N/A		N/A			12	2 1/2	4	5	2 1/2	4	18	3 1/4	5	5 7/16	15'-5"				
15'-5"	344	21	3 7/8	6	18	3 5/8	6	17	3 3/4	6	20	3 3/4	5 1/2	24	4 1/4	6 3/4	19	4	6	24	4 1/4	5 1/2	36		36	21	3 7/8	6	10	2 1/2	4	20	3 3/4	5 1/2	22	4 1/4	6 3/4	26	4	6 1/4	5 3/4	15'-5"				
16'-5"	344	18	3 7/8	6	12	3 5/8	6	14	3 3/4	6	9	3 3/4	5 1/2	21	4 1/4	6 3/4	15	4	6	19	4 1/4	5 1/2	36		36	17	3 7/8	6	N/A			18	3 3/4	5 1/2	15	4 1/4	6 3/4	23	4	6 1/4	5 3/4	16'-5"				
17'-5"	344	16	3 7/8	6	9	3 5/8	6	10	3 3/4	6	9	3 3/4	5 1/2	19	4 1/4	6 3/4	13	4	6	16	4 1/4	5 1/2	36		31	14	3 7/8	6	N/A			15	3 3/4	5 1/2	11	4 1/4	6 3/4	21	4	6 1/4	5 3/4	17'-5"				
18'-5"	445	26	5 1/8	7 7/8	24	4 1/2	6	23	4 5/8	7	25	4 1/2	6	26	5	7	N/A			32	5	6 1/4	36		36	25	5 1/8	7 7/8	N/A			25	4 1/2	6	N/A			31	5 1/2	8 1/2	6 13/16	18'-5"				
19'-5"	445	24	5 1/8	7 7/8	21	4 1/2	6	21	4 5/8	7	22	4 1/2	6	24	5	7	N/A			28	5	6 1/4	36		36	23	5 1/8	7 7/8	N/A			23	4 1/2	6	N/A			28	5 1/2	8 1/2	6 13/16	19'-5"				
20'-5"	445	22	5 1/8	7 7/8	20	4 1/2	6	20	4 5/8	7	21	4 1/2	6	23	5	7	N/A			25	5	6 1/4	36		36	22	5 1/8	7 7/8	N/A			22	4 1/2	6	N/A			26	5 1/2	8 1/2	6 13/16	20'-5"				
21'-5"	445	21	5 1/8	7 7/8	19	4 1/2	6	19	4 5/8	7	20	4 1/2	6	21	5	7	N/A			23	5	6 1/4	36		36	20	5 1/8	7 7/8	N/A			20	4 1/2	6	N/A			24	5 1/2	8 1/2	6 13/16	21'-5"				
22'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	17	4 5/8	7	19	4 1/2	6	20	5	7	N/A			21	5	6 1/4	36		36	19	5 1/8	7 7/8	N/A			19	4 1/2	6	N/A			23	5 1/2	8 1/2	6 13/16	22'-5"				
23'-5"	445	19	5 1/8	7 7/8	16	4 1/2	6	15	4 5/8	7	17	4 1/2	6	19	5	7	N/A			19	5	6 1/4	36		36	18	5 1/8	7 7/8	N/A			18	4 1/2	6	N/A			21	5 1/2	8 1/2	6 13/16	23'-5"				
24'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	11	4 5/8	7	11	4 1/2	6	18	5	7	N/A			18	5	6 1/4	36		36	17	5 1/8	7 7/8	N/A			11	4 1/2	6	N/A			19	5 1/2	8 1/2	6 13/16	24'-5"				
25'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A			16	5	6 1/4	36		36	16	5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			18	5 1/2	8 1/2	6 13/16	25'-5"				
26'-5"	546	16	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7	N/A			12	5	6 1/4	36		33	11	5 1/8	7 7/8	N/A			9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	26'-5"				
27'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36		30	10	5 1/8	7 7/8	N/A			8	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	27'-5"				
28'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			10	5	6 1/4	36		28	9	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	28'-5"				
29'-5"	546	10	5 1/8	7 7/8	6	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7	N/A			8	5	6 1/4	36		25	8	5 1/8	7 7/8	N/A			6	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	29'-5"				
30'-5"	546	9	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			6	5	6 1/4	35		23	8	5 1/8	7 7/8	N/A			5	5 1/2	6	N/A			7	5 1/2	8 1/2	6 7/8	30'-5"				
31'-5"	546	8	5 1/8	7 7/8		N/A			N/A			N/A		7	5	7	N/A				N/A		32		21	7	5 1/8	7 7/8	N/A				N/A		N/A			6	5 1/2	8 1/2	6 7/8	31'-5"				
32'-5"	546	7	5 1/8	7 7/8		N/A			N/A			N/A		6	5	7	N/A				N/A		30		19		N/A		N/A				N/A		N/A			5	5 1/2	8 1/2	6 7/8	32'-5"				
33'-5"	546	6	5 1/8	7 7/8		N/A			N/A			N/A		5	5	7	N/A				N/A		28		18		N/A		N/A				N/A		N/A				N/A		6 7/8	33'-5"				
34'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8		N/A		9	5 1/2	8	11	6 1/4	8 1/8	N/A			12	6 5/8	7 7/8	36		36	12	5 3/4	8 3/4	N/A			8	5 1/2	8	N/A			11	6 1/4	10	7 1/2	34'-5"				
35'-5"	648	10	5 3/4	8 3/4	7	5 1/2	8		N/A		8	5 1/2	8	10	6 1/4	8 1/8	N/A			11	6 5/8	7 7/8	36		36	11	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			10	6 1/4	10	7 1/2	35'-5"				
36'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8		N/A		7	5 1/2	8	9	6 1/4	8 1/8	N/A			9	6 5/8	7 7/8	36		36	10	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			9	6 1/4	10	7 1/2	36'-5"				
37'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8		N/A		7	5 1/2	8	9	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36		36	9	5 3/4	8 3/4	N/A			6	5 1/2	8	N/A			8	6 1/4	10	7 1/2	37'-5"				
38'-5"	648	8	5 3/4	8 3/4		N/A			N/A		6	5 1/2	8	8	6 1/4	8 1/8	N/A			6	6 5/8	7 7/8	36		32	9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	38'-5"				
39'-5"	648	8	5 3/4	8 3/4		N/A			N/A		5	5 1/2	8	7	6 1/4	8 1/8	N/A				N/A		36		30	8	5 3/																			

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CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 40 PSF - Continued																																										
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																										
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To	
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			
7'-5"	333*	N/A			27	2 3/8	4	26	2 3/8	3 3/4	27	2 1/2	4	35	2 1/2	4	26	2 1/4	4	36	3 1/2	4 3/4	36	36	N/A			23	1 7/8	3 1/4	27	2 1/2	4	36	2 1/2	4	36	2 1/2	4	4 9/16	7'-5"	
7'-5"	344*	N/A			20	2 3/8	4	19	2 3/8	3 3/4	20	2 1/2	4	27	2 1/2	4	19	2 1/4	4	33	3 1/2	4 3/4	36	34	N/A			18	1 7/8	3 1/4	20	2 1/2	4	28	2 1/2	4	28	2 1/2	4	5 3/4	7'-5"	
10'-5"	333	N/A			12	2 3/8	4	12	2 3/8	3 3/4	14	2 1/2	4	18	2 1/2	4	10	2 1/4	4	15	3 1/2	4 3/4	36	30	N/A			6	1 7/8	3 1/4	14	2 1/2	4	18	2 1/2	4	19	2 1/2	4	5 3/16	10'-5"	
10'-5"	344	24	3 7/8	6	22	3 5/8	6	20	3 3/4	6	23	3 3/4	5 1/2	28	4 1/4	6 3/4	22	4	6	31	4 1/4	5 1/2	36	36	24	3 7/8	6	17	2 1/2	4	24	3 3/4	5 1/2	26	4 1/4	6 3/4	31	4	6 1/4	5 3/4	10'-5"	
11'-5"	333	N/A			11	2 3/8	4	11	2 3/8	3 3/4	13	2 1/2	4	17	2 1/2	4	9	2 1/4	4	14	3 1/2	4 3/4	35	24	N/A			13	2 1/2	4	5	2 1/2	4	16	2 1/2	4	5	3/16	11'-5"			
11'-5"	344	23	3 7/8	6	20	3 5/8	6	19	3 3/4	6	22	3 3/4	5 1/2	26	4 1/4	6 3/4	21	4	6	28	4 1/4	5 1/2	36	36	23	3 7/8	6	14	2 1/2	4	23	3 3/4	5 1/2	24	4 1/4	6 3/4	29	4	6 1/4	5 3/4	11'-5"	
12'-5"	334	N/A			10	2 3/8	4	10	2 3/8	3 3/4	13	2 1/2	4	16	2 1/2	4	8	2 1/4	4	13	3 1/2	4 3/4	32	22	N/A			13	2 1/2	4	5	2 1/2	4	19	3 1/4	5	5 7/16	12'-5"				
12'-5"	344	21	3 7/8	6	19	3 5/8	6	18	3 3/4	6	20	3 3/4	5 1/2	25	4 1/4	6 3/4	20	4	6	25	4 1/4	5 1/2	36	36	21	3 7/8	6	11	2 1/2	4	21	3 3/4	5 1/2	22	4 1/4	6 3/4	27	4	6 1/4	5 3/4	12'-5"	
13'-5"	344	20	3 7/8	6	17	3 5/8	6	16	3 3/4	6	19	3 3/4	5 1/2	23	4 1/4	6 3/4	18	4	6	22	4 1/4	5 1/2	36	36	19	3 7/8	6	N/A			19	3 3/4	5 1/2	20	4 1/4	6 3/4	25	4	6 1/4	5 3/4	13'-5"	
14'-5"	344	17	3 7/8	6	9	3 5/8	6	13	3 3/4	6	9	3 3/4	5 1/2	20	4 1/4	6 3/4	14	4	6	18	4 1/4	5 1/2	36	36	16	3 7/8	6	N/A			17	3 3/4	5 1/2	13	4 1/4	6 3/4	22	4	6 1/4	5 3/4	14'-5"	
15'-5"	445	24	5 1/8	7 7/8	22	4 1/2	6	22	4 5/8	7	23	4 1/2	6	25	5	7	N/A			29	5	6 1/4	36	36	23	5 1/8	7 7/8	N/A			24	4 1/2	6	N/A			29	5 1/2	8 1/2	6 13/16	15'-5"	
16'-5"	445	24	5 1/8	7 7/8	22	4 1/2	6	21	4 5/8	7	23	4 1/2	6	24	5	7	N/A			28	5	6 1/4	36	36	23	5 1/8	7 7/8	N/A			23	4 1/2	6	N/A			28	5 1/2	8 1/2	6 13/16	16'-5"	
17'-5"	445	22	5 1/8	7 7/8	20	4 1/2	6	20	4 5/8	7	21	4 1/2	6	22	5	7	N/A			25	5	6 1/4	36	36	21	5 1/8	7 7/8	N/A			21	4 1/2	6	N/A			26	5 1/2	8 1/2	6 13/16	17'-5"	
18'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	21	5	7	N/A			22	5	6 1/4	36	36	20	5 1/8	7 7/8	N/A			20	4 1/2	6	N/A			24	5 1/2	8 1/2	6 13/16	18'-5"	
19'-5"	445	19	5 1/8	7 7/8	17	4 1/2	6	15	4 5/8	7	18	4 1/2	6	19	5	7	N/A			20	5	6 1/4	36	36	18	5 1/8	7 7/8	N/A			18	4 1/2	6	N/A			21	5 1/2	8 1/2	6 13/16	19'-5"	
20'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	11	4 5/8	7	11	4 1/2	6	18	5	7	N/A			18	5	6 1/4	36	36	17	5 1/8	7 7/8	N/A			11	4 1/2	6	N/A			19	5 1/2	8 1/2	6 13/16	20'-5"	
21'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	9	4 5/8	7	10	4 1/2	6	17	5	7	N/A			16	5	6 1/4	36	35	15	5 1/8	7 7/8	N/A			9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 13/16	21'-5"	
22'-5"	546	15	5 1/8	7 7/8	9	4 1/2	6	8	4 5/8	7	9	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36	32	11	5 1/8	7 7/8	N/A			8	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	22'-5"	
23'-5"	546	11	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			10	5	6 1/4	36	28	10	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	23'-5"	
24'-5"	546	10	5 1/8	7 7/8	6	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7	N/A			8	5	6 1/4	36	25	8	5 1/8	7 7/8	N/A			6	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	24'-5"	
25'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6	N/A			5	4 1/2	6	8	5	7	N/A			5	5	6 1/4	34	23	7	5 1/8	7 7/8	N/A			N/A			N/A			7	5 1/2	8 1/2	6 7/8	25'-5"	
26'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			7	5	7	N/A			N/A			31	20	N/A			N/A			N/A			N/A			6	5 1/2	8 1/2	6 7/8	26'-5"	
27'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			28	18	N/A			N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	27'-5"	
28'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8	N/A			9	5 1/2	8	11	6 1/4	8 1/8	N/A			12	6 5/8	7 7/8	36	36	12	5 3/4	8 3/4	N/A			8	5 1/2	8	N/A			11	6 1/4	10	7 1/2	28'-5"	
29'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	10	6 1/4	8 1/8	N/A			10	6 5/8	7 7/8	36	36	11	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			10	6 1/4	10	7 1/2	29'-5"	
30'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8	N/A			7	5 1/2	8	9	6 1/4	8 1/8	N/A			8	6 5/8	7 7/8	36	35	10	5 3/4	8 3/4	N/A			6	5 1/2	8	N/A			9	6 1/4	10	7 1/2	30'-5"	
31'-5"	648	8	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			6	6 5/8	7 7/8	36	32	9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	31'-5"	
32'-5"	648	8	5 3/4	8 3/4	N/A			N/A			5	5 1/2	8	7	6 1/4	8 1/8	N/A			N/A			36	30	8	5 3/4	8 3/4	N/A			N/A			N/A			7	6 1/4	10	7 1/2	32'-5"	
33'-5"	648	7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	8 1/8	N/A			N/A			36	28	7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	10	7 1/2	33'-5"	
34'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			5	6 1/4	8 1/8	N/A			N/A			36	26	N/A			N/A			N/A			N/A			5	6 1/4	10	7 1/2	34'-5"	

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CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 50 PSF																																											
Guide Construction								Filled CMU														Steel (Wall anchors are the same diameter as assembly fasteners)																					
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud-SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting	Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed			Max O.C.	Dia.	Embed	Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	
7'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	12	3/8	3	9	1/2	2 1/2	9	1/2	3 1/2	22	3/8	3 1/4	12	1/2	3 1/2	21	3/8	3 1/4	11	1/2	3 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	3/16	0	187	0	185	7'-5"	
7'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	8	1/2	3 3/4	N/A			9	5/8	4 3/8	12	3/8	3 1/4	12	3/4	5 1/2	12	3/8	3 1/4	N/A	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	3/16	0	188	0	185	7'-5"			
10'-5"	1 1/16	0.282	CP1151	334	11	3/8	11	10	3/4	5 1/2	N/A			N/A			9	1/2	4 1/4	N/A			8	1/2	4 1/4	N/A	8	3/8	5 7/16	15	22	7/16" x 5/8"	12	8	5	N/A	3/16	833	262	798	262	10'-5"	
10'-5"	1 1/16	0.282	CP1151	344	11	1/2	18	11	3/4	5 1/2	N/A			N/A			9	1/2	4 1/4	N/A			9	1/2	4 1/4	N/A	8	1/2	5 3/4	19	29	9/16" x 3/4"	26	20	9	6	1/4	839	263	798	262	10'-5"	
11'-5"	1 1/4	0.406	CP1152	344	11	1/2	18	11	3/4	5 1/2	N/A			N/A			9	1/2	4 1/4	N/A			8	1/2	4 1/4	N/A	8	1/2	5 3/4	18	28	9/16" x 3/4"	24	18	8	6	1/4	893	288	861	287	11'-5"	
12'-5"	1 3/8	0.531	CP1152	344	10	1/2	18	10	3/4	5 1/2	N/A			N/A			9	1/2	4 1/4	N/A			8	1/2	4 1/4	N/A	8	1/2	5 3/4	16	26	9/16" x 3/4"	22	16	8	5	1/4	976	313	951	312	12'-5"	
13'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	9	3/4	5 1/2	N/A			N/A			8	1/2	4 1/4	N/A			N/A			N/A	8	1/2	5 3/4	15	24	9/16" x 3/4"	20	14	7	5	1/4	1067	337	1046	337	13'-5"	
14'-5"	1 5/8	0.781	CP1152	445	9	5/8	18	9	3/4	5 1/2	N/A			N/A			9	3/4	6 1/4	N/A			N/A			N/A	8	5/8	6 13/16	20	28	11/16" x 7/8"	36	29	13	9	5/16	1162	361	1143	362	14'-5"	
15'-5"	1 3/4	0.906	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A			N/A			9	3/4	6 1/4	N/A			N/A			N/A	8	5/8	6 13/16	19	26	11/16" x 7/8"	35	27	12	9	5/16	1251	385	1235	387	15'-5"	
16'-5"	2	1.156	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A			N/A			8	3/4	6 1/4	N/A			N/A			N/A	8	5/8	6 13/16	19	26	11/16" x 7/8"	35	27	12	9	5/16	1243	410	1230	411	16'-5"	
17'-5"	2	1.156	CP1152	445	8	5/8	18	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	5/8	6 13/16	17	23	11/16" x 7/8"	30	23	11	8	5/16	1423	435	1410	436	17'-5"	
18'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	27	19	9	7	5/16	1601	460	1588	461	18'-5"	
19'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	5/8	6 7/8	13	18	11/16" x 7/8"	22	16	8	6	5/16	1778	485	1766	487	19'-5"	
20'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	20	13	7	5	5/16	1956	510	1944	512	20'-5"	
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	15	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	12	7	5	5/16	2135	536	2122	537	21'-5"	
22'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	15	10	6	N/A	5/16	2315	561	2302	563	22'-5"	
23'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2497	586	2484	588	23'-5"	
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	7	3/4	18	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	3/4	7 1/2	15	17	7/8" x 1"	35	26	12	9	3/8	2207	610	2195	610	24'-5"	
25'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	3/4	7 1/2	14	16	7/8" x 1"	33	23	11	8	3/8	2364	635	2352	636	25'-5"	
26'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	3/4	7 1/2	13	15	7/8" x 1"	30	21	11	7	3/8	2522	660	2510	661	26'-5"	
27'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	3/4	7 1/2	12	14	7/8" x 1"	28	20	10	7	3/8	2682	686	2670	686	27'-5"	
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2844	711	2832	712	28'-5"	
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A			N/A			N/A			N/A			N/A			N/A			N/A	8	3/4	7 1/2	11	12	7/8" x 1"	24	16	9	6	3/8	3008	736	2995	737	29'-5"	

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 50 PSF - Continued																																															
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																															
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To				
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.					Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.						
7'-5"	333*	N/A			24	2 3/8	4	23	2 3/8	3 3/4	24	2 1/2	4	32	2 1/2	4	23	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A			21	1 7/8	3 1/4	24	2 1/2	4	33	2 1/2	4	34	2 1/2	4	4 9/16	7'-5"				
7'-5"	344*	N/A			18	2 3/8	4	17	2 3/8	3 3/4	18	2 1/2	4	24	2 1/2	4	15	2 1/4	4	26	3 1/2	4 3/4	35		27		N/A			16	1 7/8	3 1/4	18	2 1/2	4	25	2 1/2	4	25	2 1/2	4	5 3/4	7'-5"				
10'-5"	334	N/A			5	2 3/8	4	5	2 3/8	4	5	2 1/2	4	5	2 1/2	4	5	2 1/4	4	10	3 1/2	4 3/4	24		16		N/A			N/A			5	2 1/2	4	5	2 1/2	4	6	3 1/4	5	5 7/16	10'-5"				
10'-5"	344	18	3 7/8	6	14	3 5/8	6	15	3 3/4	6	18	3 3/4	5 1/2	21	4 1/4	6 3/4	16	4	6	20	4 1/4	5 1/2	36		36		17	3 7/8	6	N/A			18	3 3/4	5 1/2	16	4 1/4	6 3/4	23	4	6 1/4	5 3/4	10'-5"				
11'-5"	344	18	3 7/8	6	12	3 5/8	6	14	3 3/4	6	16	3 3/4	5 1/2	21	4 1/4	6 3/4	15	4	6	19	4 1/4	5 1/2	36		36		17	3 7/8	6	N/A			18	3 3/4	5 1/2	15	4 1/4	6 3/4	23	4	6 1/4	5 3/4	11'-5"				
12'-5"	344	17	3 7/8	6	9	3 5/8	6	12	3 3/4	6	9	3 3/4	5 1/2	20	4 1/4	6 3/4	14	4	6	17	4 1/4	5 1/2	36		35		15	3 7/8	6	N/A			17	3 3/4	5 1/2	13	4 1/4	6 3/4	22	4	6 1/4	5 3/4	12'-5"				
13'-5"	344	15	3 7/8	6	9	3 5/8	6	9	3 3/4	6	9	3 3/4	5 1/2	19	4 1/4	6 3/4	12	4	6	16	4 1/4	5 1/2	36		30		14	3 7/8	6	N/A			9	3 3/4	5 1/2	10	4 1/4	6 3/4	20	4	6 1/4	5 3/4	13'-5"				
14'-5"	445	21	5 1/8	7 7/8	19	4 1/2	6	19	4 5/8	7	20	4 1/2	6	21	5	7	N/A		23	5	6 1/4	36		36		20		5 1/8	7 7/8	N/A			21	4 1/2	6	N/A			25	5 1/2	8 1/2	6 13/16	14'-5"				
15'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	20	5	7	N/A		21	5	6 1/4	36		36		20		5 1/8	7 7/8	N/A			20	4 1/2	6	N/A			23	5 1/2	8 1/2	6 13/16	15'-5"				
16'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	20	5	7	N/A		21	5	6 1/4	36		36		19		5 1/8	7 7/8	N/A			20	4 1/2	6	N/A			23	5 1/2	8 1/2	6 13/16	16'-5"				
17'-5"	445	18	5 1/8	7 7/8	16	4 1/2	6	11	4 5/8	7	17	4 1/2	6	19	5	7	N/A		19	5	6 1/4	36		36		18		5 1/8	7 7/8	N/A			11	4 1/2	6	N/A			20	5 1/2	8 1/2	6 13/16	17'-5"				
18'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A		17	5	6 1/4	36		36		16		5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			18	5 1/2	8 1/2	6 13/16	18'-5"				
19'-5"	546	15	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	11	5	7	N/A		12	5	6 1/4	36		32		11		5 1/8	7 7/8	N/A			9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	19'-5"				
20'-5"	546	11	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A		10	5	6 1/4	36		28		10		5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	20'-5"				
21'-5"	546	9	5 1/8	7 7/8	6	4 1/2	6	5	4 5/8	7	6	4 1/2	6	9	5	7	N/A		7	5	6 1/4	36		25		8		5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	21'-5"				
22'-5"	546	8	5 1/8	7 7/8	N/A			N/A			N/A			7			5	7	N/A			N/A			32		22		7			5 1/8	7 7/8	N/A			N/A			7	5 1/2	8 1/2	6 7/8	22'-5"			
23'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			6			5	7	N/A			N/A			29		19		N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	23'-5"					
24'-5"	648	11	5 3/4	8 3/4	8	5 1/2	8	N/A			9			5 1/2	8	11	6 1/4	8 1/8	N/A			12			6 5/8	7 7/8	36		36		12	5 3/4	8 3/4	N/A			8	5 1/2	8	N/A			11	6 1/4	10	7 1/2	24'-5"
25'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8			5 1/2	8	10	6 1/4	8 1/8	N/A			10			6 5/8	7 7/8	36		36		11	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			10	6 1/4	10	7 1/2	25'-5"
26'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8	N/A			7			5 1/2	8	9	6 1/4	8 1/8	N/A			8			6 5/8	7 7/8	36		36		10	5 3/4	8 3/4	N/A			6	5 1/2	8	N/A			9	6 1/4	10	7 1/2	26'-5"
27'-5"	648	8	5 3/4	8 3/4	N/A			N/A			6			5 1/2	8	8	6 1/4	8 1/8	N/A			5			6 5/8	7 7/8	36		31		9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	27'-5"
28'-5"	648	7	5 3/4	8 3/4	N/A			N/A			5			5 1/2	8	7	6 1/4	8 1/8	N/A			N/A			N/A			36		29		8	5 3/4	8 3/4	N/A			N/A			7	6 1/4	10	7 1/2	28'-5"		
29'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			5			6 1/4	8 1/8	N/A			N/A			N/A			36		26		7	5 3/4	8 3/4	N/A			N/A			5	6 1/4	10	7 1/2	29'-5"		

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 60 PSF																																												
Guide Construction								Filled CMU										Steel (Wall anchors are the same diameter as assembly fasteners)																										
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt TZ2 Carbon & Stainless Steel			Powers Power-Stud- SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size		Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)				
6'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	12	3/8	3	9	1/2	2 1/2	9	1/2	3 1/2	21	3/8	3 1/4	15	5/8	4 1/2	20	3/8	3 1/4	15	5/8	4 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	194	0	193	6'-5"
6'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	10	5/8	4 1/2	N/A	N/A	N/A	8	5/8	4 3/8	12	3/8	3 1/4	N/A	N/A	N/A	11	3/8	3 1/4	N/A	N/A	N/A	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	195	0	193	6'-5"
10'-5"	1 1/8	0.281	CP1152	344	9	1/2	18	8	3/4	5 1/2	N/A	N/A	N/A	8	3/4	6 1/4	N/A	N/A	8	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	8	1/2	5 3/4	13	21	9/16" x 3/4"	18	12	6	N/A	1/4	1169	316	1124	316	10'-5"	
11'-5"	1 1/2	0.656	CP1152	DC4	8	1/2	18	5	1/2	3 3/4	N/A	N/A	N/A	8	1/2	4 1/4	N/A	N/A	9	1/2	4 1/4	N/A	N/A	N/A	N/A	N/A	N/A	8	1/2	7 1/4	11	11	9/16" x 3/4"	11	7	11	7	1/4	1171	374	1147	374	11'-5"	
12'-5"	1 3/8	0.531	CP1152	445	9	5/8	18	8	3/4	5 1/2	N/A	N/A	N/A	8	3/4	6 1/4	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	18	24	11/16" x 7/8"	34	26	12	8	5/16	1287	374	1258	375	12'-5"						
13'-5"	1 1/2	0.656	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	17	23	11/16" x 7/8"	31	24	11	8	5/16	1381	404	1356	405	13'-5"						
14'-5"	1 5/8	0.781	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	16	22	11/16" x 7/8"	29	22	10	7	5/16	1478	433	1456	435	14'-5"							
15'-5"	1 3/4	0.906	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	27	20	10	7	5/16	1575	463	1555	464	15'-5"							
16'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	21	11/16" x 7/8"	28	20	10	7	5/16	1556	492	1541	493	16'-5"							
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	13	18	11/16" x 7/8"	23	16	8	6	5/16	1764	522	1749	523	17'-5"							
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	1972	552	1957	554	18'-5"							
19'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	11	6	N/A	5/16	2180	582	2165	584	19'-5"							
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	15	10	6	N/A	5/16	2389	613	2374	615	20'-5"							
21'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	8	12	11/16" x 7/8"	13	8	5	N/A	5/16	2600	643	2585	645	21'-5"							
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	16	7/8" x 1"	33	24	11	8	3/8	2312	671	2298	672	22'-5"							
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	15	7/8" x 1"	31	22	11	8	3/8	2494	702	2480	702	23'-5"							
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	14	7/8" x 1"	28	20	10	7	3/8	2678	732	2663	733	24'-5"							
25'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2863	762	2849	763	25'-5"							
26'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	12	7/8" x 1"	23	16	9	6	3/8	3051	793	3037	794	26'-5"							

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 60 PSF - Continued																																													
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																													
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To		
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.								
6'-5"	333*	N/A			24	2 3/8	4	23	2 3/8	3 3/4	24	2 1/2	4	31	2 1/2	4	23	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A			20	1 7/8	3 1/4	23	2 1/2	4	32	2 1/2	4	33	2 1/2	4	4 9/16	6'-5"		
6'-5"	344*	N/A			18	2 3/8	4	17	2 3/8	3 3/4	18	2 1/2	4	23	2 1/2	4	14	2 1/4	4	25	3 1/2	4 3/4	34		26		N/A			15	1 7/8	3 1/4	17	2 1/2	4	24	2 1/2	4	25	2 1/2	4	5 3/4	6'-5"		
10'-5"	344	10	3 7/8	6	8	3 5/8	6	9	3 3/4	6	8	3 3/4	5 1/2	17	4 1/4	6 3/4	10	4	6	14	4 1/4	5 1/2	36		29		12	3 7/8	6	N/A			9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	10'-5"		
11'-5"	DC4	10	3 7/8	6	8	3 5/8	6	9	3 3/4	6	8	3 3/4	5 1/2	17	4 1/4	6 3/4	8	4	6	14	4 1/4	5 1/2	34		15		12	3 7/8	6	N/A			9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	11'-5"		
12'-5"	445	20	5 1/8	7 7/8	18	4 1/2	6	18	4 5/8	7	19	4 1/2	6	20	5	7	N/A			21	5	6 1/4	36		36		19	5 1/8	7 7/8	N/A			19	4 1/2	6	N/A			23	5 1/2	8 1/2	6 13/16	12'-5"		
13'-5"	445	19	5 1/8	7 7/8	17	4 1/2	6	15	4 5/8	7	18	4 1/2	6	19	5	7	N/A			19	5	6 1/4	36		36		18	5 1/8	7 7/8	N/A			18	4 1/2	6	N/A			21	5 1/2	8 1/2	6 13/16	13'-5"		
14'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	11	4 5/8	7	11	4 1/2	6	18	5	7	N/A			18	5	6 1/4	36		36		17	5 1/8	7 7/8	N/A			11	4 1/2	6	N/A			20	5 1/2	8 1/2	6 13/16	14'-5"		
15'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A			17	5	6 1/4	36		36		16	5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			19	5 1/2	8 1/2	6 13/16	15'-5"		
16'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A			17	5	6 1/4	36		36		16	5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			19	5 1/2	8 1/2	6 13/16	16'-5"		
17'-5"	546	15	5 1/8	7 7/8	9	4 1/2	6	8	4 5/8	7	9	4 1/2	6	11	5	7	N/A			12	5	6 1/4	36		32		11	5 1/8	7 7/8	N/A			8	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	17'-5"		
18'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			10	5	6 1/4	36		27		9	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	18'-5"		
19'-5"	546	9	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			6	5	6 1/4	35		24		8	5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			7	5 1/2	8 1/2	6 7/8	19'-5"		
20'-5"	546	7	5 1/8	7 7/8		N/A			N/A			N/A		7	5	7	N/A				N/A			31		20			N/A		N/A				N/A			N/A			6	5 1/2	8 1/2	6 7/8	20'-5"
21'-5"	546	6	5 1/8	7 7/8		N/A			N/A			N/A		5	5	7	N/A				N/A			27		17			N/A		N/A				N/A			N/A			6	7/8	21'-5"		
22'-5"	648	10	5 3/4	8 3/4	7	5 1/2	8		N/A		8	5 1/2	8	10		6 1/4	8 1/8	N/A		11	6 5/8	7 7/8	36		36		11	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			10	6 1/4	10	7 1/2	22'-5"		
23'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8		N/A		7	5 1/2	8	9		6 1/4	8 1/8	N/A		8	6 5/8	7 7/8	36		34		10	5 3/4	8 3/4	N/A			6	5 1/2	8	N/A			9	6 1/4	10	7 1/2	23'-5"		
24'-5"	648	8	5 3/4	8 3/4		N/A			N/A		6	5 1/2	8	8		6 1/4	8 1/8	N/A		5	6 5/8	7 7/8	36		31		9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			7	6 1/4	10	7 1/2	24'-5"		
25'-5"	648	7	5 3/4	8 3/4		N/A			N/A			N/A		6		6 1/4	8 1/8	N/A			N/A			36		28		7	5 3/4	8 3/4	N/A				N/A			6	6 1/4	10	7 1/2	25'-5"			
26'-5"	648	6	5 3/4	8 3/4		N/A			N/A			N/A		5		6 1/4	8 1/8	N/A			N/A			36		26			N/A		N/A				N/A			5	6 1/4	10	7 1/2	26'-5"			

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Guide Construction								CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 65 PSF																				Steel (Wall anchors are the same diameter as assembly fasteners)																
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Filled CMU																																				
								Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud-SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Slot Max O.C.		Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)		
6'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	11	3/8	3	8	1/2	2 1/2	8	1/2	3 1/2	19	3/8	3 1/4	14	5/8	4 1/2	19	3/8	3 1/4	14	5/8	4 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	3/16	0	211	0	209	6'-5"		
6'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	9	5/8	4 1/2	N/A			8	5/8	4 3/8	11	3/8	3 1/4	N/A			10	3/8	3 1/4	N/A			8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	3/16	0	211	0	209	6'-5"		
11'-5"	1 1/2	0.656	CP1152	DC4	8	1/2	18	5	1/2	3 3/4	N/A			N/A			8	1/2	4 1/4	N/A			9	1/2	4 1/4	N/A			8	1/2	7 1/4	11	11	9/16" x 3/4"	11	7	1/4	1171	374	1147	374	11'-5"		
12'-5"	1 3/8	0.531	CP1152	445	8	5/8	18	N/A			N/A			N/A			N/A			N/A			8	5/8	6 13/16	16	22	11/16" x 7/8"	8	5/8	6 13/16	16	22	11/16" x 7/8"	30	22	10	7	5/16	1442	405	1411	407	12'-5"
13'-5"	1 1/2	0.656	CP1152	445	8	5/8	18	N/A			N/A			N/A			N/A			N/A			8	5/8	6 13/16	15	21	11/16" x 7/8"	8	5/8	6 13/16	15	21	11/16" x 7/8"	28	20	10	7	5/16	1537	437	1510	439	13'-5"
14'-5"	1 5/8	0.781	CP1152 & CP1153	445	8	5/8	18	N/A			N/A			N/A			N/A			N/A			8	5/8	6 13/16	14	20	11/16" x 7/8"	8	5/8	6 13/16	14	20	11/16" x 7/8"	26	19	9	6	5/16	1636	469	1613	471	14'-5"
15'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	18	N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	13	18	11/16" x 7/8"	8	5/8	6 7/8	13	18	11/16" x 7/8"	23	16	8	6	5/16	1736	501	1716	503	15'-5"
16'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	13	19	11/16" x 7/8"	8	5/8	6 7/8	13	19	11/16" x 7/8"	24	17	8	6	5/16	1712	533	1696	534	16'-5"
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	12	16	11/16" x 7/8"	8	5/8	6 7/8	12	16	11/16" x 7/8"	20	14	7	5	5/16	1935	565	1919	567	17'-5"
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	14	N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	10	15	11/16" x 7/8"	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	11	6	5	5/16	2157	598	2141	600	18'-5"
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	9	13	11/16" x 7/8"	8	5/8	6 7/8	9	13	11/16" x 7/8"	15	10	6	N/A	5/16	2381	631	2364	633	19'-5"
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	8	12	11/16" x 7/8"	8	5/8	6 7/8	8	12	11/16" x 7/8"	13	8	5	N/A	5/16	2605	664	2589	666	20'-5"
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	14	16	7/8" x 1"	8	3/4	7 1/2	14	16	7/8" x 1"	33	24	11	8	3/8	2326	694	2310	695	21'-5"
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	13	15	7/8" x 1"	8	3/4	7 1/2	13	15	7/8" x 1"	30	21	10	7	3/8	2519	727	2504	728	22'-5"
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	12	14	7/8" x 1"	8	3/4	7 1/2	12	14	7/8" x 1"	27	19	10	7	3/8	2715	760	2699	761	23'-5"
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	11	13	7/8" x 1"	8	3/4	7 1/2	11	13	7/8" x 1"	25	17	9	6	3/8	2913	793	2897	794	24'-5"

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 65 PSF - Continued																																													
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																													
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To		
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.								
6'-5"	333*	N/A			23	2 3/8	4	22	2 3/8	3 3/4	23	2 1/2	4	30	2 1/2	4	22	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A			20	1 7/8	3 1/4	22	2 1/2	4	31	2 1/2	4	32	2 1/2	4	4 9/16	6'-5"		
6'-5"	344*	N/A			17	2 3/8	4	16	2 3/8	3 3/4	17	2 1/2	4	22	2 1/2	4	13	2 1/4	4	23	3 1/2	4 3/4	31		24		N/A			15	1 7/8	3 1/4	17	2 1/2	4	23	2 1/2	4	24	2 1/2	4	5 3/4	6'-5"		
11'-5"	DC4	10	3 7/8	6	8	3 5/8	6	9	3 3/4	6	8	3 3/4	5 1/2	17	4 1/4	6 3/4	8	4	6	14	4 1/4	5 1/2	34		15		12	3 7/8	6	N/A			9	3 3/4	5 1/2	9	4 1/4	6 3/4	7	4	6 1/4	5 3/4	11'-5"		
12'-5"	445	18	5 1/8	7 7/8	15	4 1/2	6	11	4 5/8	7	11	4 1/2	6	19	5	7	N/A			19	5	6 1/4	36		36		18	5 1/8	7 7/8	N/A			11	4 1/2	6	N/A			20	5 1/2	8 1/2	6 13/16	12'-5"		
13'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	10	4 5/8	7	11	4 1/2	6	18	5	7	N/A			18	5	6 1/4	36		36		17	5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			19	5 1/2	8 1/2	6 13/16	13'-5"		
14'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7	N/A			16	5	6 1/4	36		36		16	5 1/8	7 7/8	N/A			10	4 1/2	6	N/A			17	5 1/2	8 1/2	6 13/16	14'-5"		
15'-5"	546	16	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7	N/A			12	5	6 1/4	36		34		11	5 1/8	7 7/8	N/A			9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	15'-5"		
16'-5"	546	16	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7	N/A			13	5	6 1/4	36		33		11	5 1/8	7 7/8	N/A			9	4 1/2	6	N/A			10	5 1/2	8 1/2	6 7/8	16'-5"		
17'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7	N/A			10	5	6 1/4	36		28		9	5 1/8	7 7/8	N/A			7	4 1/2	6	N/A			9	5 1/2	8 1/2	6 7/8	17'-5"		
18'-5"	546	9	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			6	5	6 1/4	35		24		8	5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	18'-5"		
19'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			7	5	7	N/A			N/A			31		20		N/A			N/A			N/A			N/A			6	5 1/2	8 1/2	6 7/8	19'-5"		
20'-5"	546	5	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			27		17		N/A			N/A			N/A			N/A			N/A			6	7/8	20'-5"	
21'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8	N/A			8	5 1/2	8	10	6 1/4	8 1/8	N/A			10			6 5/8	7 7/8	36		36		11	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A			10	6 1/4	10	7 1/2	21'-5"
22'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8	N/A			7	5 1/2	8	9	6 1/4	8 1/8	N/A			8			6 5/8	7 7/8	36		34		10	5 3/4	8 3/4	N/A			6	5 1/2	8	N/A			8	6 1/4	10	7 1/2	22'-5"
23'-5"	648	8	5 3/4	8 3/4	N/A			N/A			5	5 1/2	8	7	6 1/4	8 1/8	N/A			N/A			36		30		8	5 3/4	8 3/4	N/A			N/A			N/A			7	6 1/4	10	7 1/2	23'-5"		
24'-5"	648	6	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	8 1/8	N/A			N/A			36		27		7	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	10	7 1/2	24'-5"		

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CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 70 PSF																																												
Guide Construction								Filled CMU																	Steel (Wall anchors are the same diameter as assembly fasteners)																			
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt TZ2 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size		Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)				
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	12	3/8	3	9	1/2	2 1/2	9	1/2	3 1/2	21	3/8	3 1/4	12	3/8	3 1/4	12	3/8	3 1/4	11	1/2	3 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	192	0	190	5'-5"
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	10	5/8	4 1/2	N/A	N/A	N/A	8	5/8	4 3/8	12	3/8	3 1/4	N/A	N/A	N/A	12	3/8	3 1/4	N/A	N/A	N/A	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	193	0	190	5'-5"
11'-5"	1 1/4	0.406	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	28	21	10	7	5/16	1521	402	1481	404	11'-5"	
12'-5"	1 3/8	0.531	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	15	20	11/16" x 7/8"	27	19	9	7	5/16	1597	437	1564	438	12'-5"	
13'-5"	1 1/2	0.656	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	14	19	11/16" x 7/8"	25	18	9	6	5/16	1692	471	1664	473	13'-5"	
14'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	18	11/16" x 7/8"	22	15	8	6	5/16	1794	506	1769	507	14'-5"	
15'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	21	14	7	5	5/16	1898	540	1876	542	15'-5"	
16'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	21	15	8	5	5/16	1868	574	1851	576	16'-5"	
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	15	11/16" x 7/8"	18	12	7	5	5/16	2105	609	2088	611	17'-5"	
18'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	14	11/16" x 7/8"	15	10	6	N/A	5/16	2343	644	2326	647	18'-5"	
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	8	12	11/16" x 7/8"	13	8	5	N/A	5/16	2581	680	2564	682	19'-5"	
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	16	7/8" x 1"	33	24	11	8	3/8	2313	713	2297	713	20'-5"	
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	15	7/8" x 1"	30	21	10	7	3/8	2519	748	2502	749	21'-5"	
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	14	7/8" x 1"	27	19	10	7	3/8	2726	783	2710	784	22'-5"	
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	13	7/8" x 1"	25	17	9	6	3/8	2935	819	2919	820	23'-5"	

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 70 PSF - Continued																																											
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																											
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt TZ2			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt TZ2 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.						
5'-5"	333*	N/A			24	2 3/8	4	23	2 3/8	3 3/4	24	2 1/2	4	31	2 1/2	4	23	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A			21	1 7/8	3 1/4	23	2 1/2	4	33	2 1/2	4	33	2 1/2	4	4 9/16	5'-5"
5'-5"	344*	N/A			18	2 3/8	4	17	2 3/8	3 3/4	18	2 1/2	4	23	2 1/2	4	15	2 1/4	4	25	3 1/2	4 3/4	34		27		N/A			15	1 7/8	3 1/4	18	2 1/2	4	25	2 1/2	4	5 3/4	5'-5"			
11'-5"	445	18	5 1/8	7 7/8	11	4 1/2	6	11	4 5/8	7	11	4 1/2	6	18	5	7			N/A	18	5	6 1/4	36		36		17	5 1/8	7 7/8		N/A		11	4 1/2	6		N/A	19	5 1/2	8 1/2	6 13/16	11'-5"	
12'-5"	445	17	5 1/8	7 7/8	10	4 1/2	6	10	4 5/8	7	10	4 1/2	6	17	5	7			N/A	17	5	6 1/4	36		36		16	5 1/8	7 7/8		N/A		10	4 1/2	6		N/A	18	5 1/2	8 1/2	6 13/16	12'-5"	
13'-5"	445	17	5 1/8	7 7/8	9	4 1/2	6	9	4 5/8	7	9	4 1/2	6	16	5	7			N/A	13	5	6 1/4	36		35		11	5 1/8	7 7/8		N/A		9	4 1/2	6		N/A	10	5 1/2	8 1/2	6 13/16	13'-5"	
14'-5"	546	15	5 1/8	7 7/8	9	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7			N/A	12	5	6 1/4	36		33		11	5 1/8	7 7/8		N/A		8	4 1/2	6		N/A	10	5 1/2	8 1/2	6 7/8	14'-5"	
15'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	7	4 5/8	7	8	4 1/2	6	10	5	7			N/A	11	5	6 1/4	36		30		10	5 1/8	7 7/8		N/A		7	4 1/2	6		N/A	10	5 1/2	8 1/2	6 7/8	15'-5"	
16'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	7	4 5/8	7	8	4 1/2	6	10	5	7			N/A	11	5	6 1/4	36		29		10	5 1/8	7 7/8		N/A		7	4 1/2	6		N/A	10	5 1/2	8 1/2	6 7/8	16'-5"	
17'-5"	546	9	5 1/8	7 7/8	6	4 1/2	6	5	4 5/8	7	5	4 1/2	6	9	5	7			N/A	7	5	6 1/4	36		25		8	5 1/8	7 7/8		N/A		5	4 1/2	6		N/A	8	5 1/2	8 1/2	6 7/8	17'-5"	
18'-5"	546	7	5 1/8	7 7/8					N/A			N/A		7	5	7			N/A				31		21			N/A			N/A			N/A			N/A	6	5 1/2	8 1/2	6 7/8	18'-5"	
19'-5"	546	6	5 1/8	7 7/8					N/A			N/A		5	5	7			N/A				27		17			N/A			N/A			N/A			N/A		N/A	6 7/8	19'-5"		
20'-5"	648	10	5 3/4	8 3/4	6	5 1/2	8		N/A		8	5 1/2	8	10	6 1/4	8 1/8	N/A			10	6 5/8	7 7/8	36		36		11	5 3/4	8 3/4	N/A			7	5 1/2	8	N/A		10	6 1/4	10	7 1/2	20'-5"	
21'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8		N/A		7	5 1/2	8	9	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36		33		9	5 3/4	8 3/4	N/A			6	5 1/2	8	N/A		8	6 1/4	10	7 1/2	21'-5"	
22'-5"	648	8	5 3/4	8 3/4					N/A		5	5 1/2	8	7	6 1/4	8 1/8	N/A				N/A			36		30		8	5 3/4	8 3/4	N/A				N/A		N/A		7	6 1/4	10	7 1/2	22'-5"
23'-5"	648	6	5 3/4	8 3/4					N/A			N/A		6	6 1/4	8 1/8	N/A				N/A			36		27		7	5 3/4	8 3/4	N/A				N/A		N/A		6	6 1/4	10	7 1/2	23'-5"

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	11/24/2025	KAD	2398

Guide Construction										CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 80 PSF																																		
										Filled CMU																		Steel (Wall anchors are the same diameter as assembly fasteners)																
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud- SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Jamb Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)	
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	11	3/8	3	8	1/2	2 1/2	8	1/2	3 1/2	18	3/8	3 1/4	13	5/8	4 1/2	18	3/8	3 1/4	13	5/8	4 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	219	0	217	5'-5"
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	8	5/8	4 1/2	N/A	N/A	N/A	8	3/4	5 1/4	10	3/8	3 1/4	N/A	N/A	N/A	10	3/8	3 1/4	N/A	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	220	0	217	5'-5"		
11'-5"	1 1/4	0.406	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 13/16	13	17	11/16" x 7/8"	23	16	8	6	5/16	1835	460	1791	462	11'-5"						
12'-5"	1 3/8	0.531	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	12	17	11/16" x 7/8"	20	14	7	5	5/16	1906	499	1869	501	12'-5"							
13'-5"	1 1/2	0.656	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	16	11/16" x 7/8"	19	13	7	5	5/16	2003	539	1971	541	13'-5"							
14'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	11	15	11/16" x 7/8"	18	12	7	5	5/16	2110	578	2082	580	14'-5"							
15'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	16	11	6	N/A	5/16	2221	618	2197	620	15'-5"							
16'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	11	6	N/A	5/16	2181	656	2162	658	16'-5"							
17'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2447	696	2427	699	17'-5"							
18'-5"	2 1/2	1.656	CP1152 & CP1153	648	7	3/4	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	15	17	7/8" x 1"	35	25	12	8	3/8	2215	734	2197	735	18'-5"							
19'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	14	15	7/8" x 1"	31	22	11	8	3/8	2443	774	2425	775	19'-5"							
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	14	7/8" x 1"	28	19	10	7	3/8	2673	815	2655	816	20'-5"							
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	11	13	7/8" x 1"	25	17	9	6	3/8	2905	855	2887	856	21'-5"							

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 80 PSF - Continued																																											
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																											
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.		Through Bolting - Stainless Steel Max O.C.		Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.				
5'-5"	333*		N/A		22	2 3/8	4	21	2 3/8	3 3/4	22	2 1/2	4	29	2 1/2	4	21	2 1/4	4	36	3 1/2	4 3/4	36		36		N/A	19	1 7/8	3 1/4	22	2 1/2	4	31	2 1/2	4	31	2 1/2	4	4 9/16	5'-5"		
5'-5"	344*		N/A		17	2 3/8	4	16	2 3/8	3 3/4	17	2 1/2	4	22	2 1/2	4	13	2 1/4	4	22	3 1/2	4 3/4	30		23		N/A	14	1 7/8	3 1/4	16	2 1/2	4	23	2 1/2	4	23	2 1/2	4	5 3/4	5'-5"		
11'-5"	445	11	5 1/8	7 7/8	8	4 1/2	6	8	4 5/8	7	8	4 1/2	6	11	5	7		N/A		11	5	6 1/4	36		33	10	5 1/8	7 7/8		N/A	8	4 1/2	6		N/A	10	5 1/2	8 1/2	6 13/16	11'-5"			
12'-5"	546	11	5 1/8	7 7/8	8	4 1/2	6	7	4 5/8	7	8	4 1/2	6	10	5	7		N/A		11	5	6 1/4	36		31	10	5 1/8	7 7/8		N/A	7	4 1/2	6		N/A	10	5 1/2	8 1/2	6 7/8	12'-5"			
13'-5"	546	10	5 1/8	7 7/8	7	4 1/2	6	7	4 5/8	7	7	4 1/2	6	10	5	7		N/A		9	5	6 1/4	36		28	9	5 1/8	7 7/8		N/A	6	4 1/2	6		N/A	9	5 1/2	8 1/2	6 7/8	13'-5"			
14'-5"	546	9	5 1/8	7 7/8	6	4 1/2	6	6	4 5/8	7	6	4 1/2	6	9	5	7		N/A		7	5	6 1/4	36		26	8	5 1/8	7 7/8		N/A	5	4 1/2	6		N/A	8	5 1/2	8 1/2	6 7/8	14'-5"			
15'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6		N/A		5	4 1/2	6	8	5	7		N/A		5	5	6 1/4	34		23	7	5 1/8	7 7/8		N/A		N/A		N/A	7	5 1/2	8 1/2	6 7/8	15'-5"				
16'-5"	546	8	5 1/8	7 7/8	5	4 1/2	6		N/A		5	4 1/2	6	8	5	7		N/A		5	5	6 1/4	34		23	7	5 1/8	7 7/8		N/A		N/A		N/A	7	5 1/2	8 1/2	6 7/8	16'-5"				
17'-5"	546	6	5 1/8	7 7/8		N/A			N/A			N/A		6	5	7		N/A			N/A		29		19		N/A			N/A		N/A		N/A	5	5 1/2	8 1/2	6 7/8	17'-5"				
18'-5"	648	11	5 3/4	8 3/4	7	5 1/2	8		N/A		9	5 1/2	8	11	6 1/4	8 1/8		N/A		12	6 5/8	7 7/8	36		36	11	5 3/4	8 3/4		N/A	8	5 1/2	8		N/A	10	6 1/4	10	7 1/2	18'-5"			
19'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8		N/A		7	5 1/2	8	9	6 1/4	8 1/8		N/A		8	6 5/8	7 7/8	36		34	10	5 3/4	8 3/4		N/A	6	5 1/2	8		N/A	9	6 1/4	10	7 1/2	19'-5"			
20'-5"	648	8	5 3/4	8 3/4		N/A			N/A		5	5 1/2	8	7	6 1/4	8 1/8		N/A			N/A		36		30	8	5 3/4	8 3/4		N/A		N/A		N/A	7	6 1/4	10	7 1/2	20'-5"				
21'-5"	648	6	5 3/4	8 3/4		N/A			N/A			N/A		6	6 1/4	8 1/8		N/A			N/A		36		27	7	5 3/4	8 3/4		N/A		N/A		N/A	6	6 1/4	10	7 1/2	21'-5"				

Guide Construction										CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 90 PSF																																				
										Filled CMU															Steel (Wall anchors are the same diameter as assembly fasteners)																					
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud- SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To		
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Embed	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Thickness	Vx (+)	Vy (+)	Vx (-)		Vy (-)	
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	9	3/8	3	9	5/8	3/8	3/8	12	5/8	4 3/8	9	3/8	3 1/4	12	5/8	4 1/2	16	3/8	3 1/4	12	5/8	4 1/2	8	3/8	4	9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	247	0	244	5'-5"
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	15	3/4	5 1/2	N/A	N/A	N/A	N/A	12	5/8	4 3/8	9	3/8	3 1/4	N/A	N/A	N/A	16	3/8	3 1/4	12	5/8	4 1/2	8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	248	0	244	5'-5"	
10'-5"	1 1/8	0.281	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	17	11	6	5	5/16	2164	474	2103	476	10'-5"				
11'-5"	1 1/4	0.406	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	15	11/16" x 7/8"	17	12	6	5	5/16	2149	518	2100	520	11'-5"					
12'-5"	1 3/8	0.531	CP1152 & CP1153	546	7	5/8	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	16	11	6	N/A	5/16	2216	562	2175	564	12'-5"						
13'-5"	1 1/2	0.656	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	10	14	11/16" x 7/8"	15	10	6	N/A	5/16	2314	607	2279	609	13'-5"						
14'-5"	1 5/8	0.781	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2426	651	2395	653	14'-5"							
15'-5"	1 3/4	0.906	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	12	11/16" x 7/8"	13	8	5	N/A	5/16	2545	695	2517	698	15'-5"							
16'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2493	738	2472	741	16'-5"							
17'-5"	2 1/4	1.406	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	15	7/8" x 1"	30	21	11	7	3/8	2501	783	2476	784	17'-5"							
18'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	13	15	7/8" x 1"	30	21	10	7	3/8	2524	826	2503	827	18'-5"							
19'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2777	872	2757	873	19'-5"							
20'-5"	2 9/16	1.719	CP1152 & CP1153	DC6	6	3/4	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	9 1/4	11	12	7/8" x 1"	24	16	9	6	3/8	2970	916	2951	918	20'-5"							

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*	ORIGINAL ISSUE	11/24/2025	KAD	2398

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 90 PSF - Continued																																									
Concrete Minimum 4,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																																									
D.B.G. Up To	Guide Assembly	Simpson Strong-Bolt 2			Hilti Kwik Bolt 1			Powers Power-Stud+ SD1			Hilti Kwik Bolt T22			Hilti KH-EZ			ITW Redhead Trubolt			Hilti HVU2			Through Bolting - Carbon Steel Max O.C.	Through Bolting - Stainless Steel Max O.C.	Simpson Strong-Bolt 2 Stainless Steel			Powers Power-Stud+ SD4 Stainless Steel			Hilti Kwik Bolt T22 Stainless Steel			Hilti KH-EZ Stainless Steel			Simpson Titen HD Stainless Steel			Min. Edge Distance	D.B.G. Up To
		Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.			Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.	Max O.C.	Embed	Min. Wall Thick.		
5'-5"	333*	N/A			21	2 3/8	4	20	2 3/8	3 3/4	21	2 1/2	4	28	2 1/2	4	20	2 1/4	4	33	3 1/2	4 3/4	36	36	N/A			18	1 7/8	3 1/4	21	2 1/2	4	29	2 1/2	4	29	2 1/2	4	4 9/16	5'-5"
5'-5"	344*	N/A			16	2 3/8	4	15	2 3/8	3 3/4	16	2 1/2	4	21	2 1/2	4	11	2 1/4	4	20	3 1/2	4 3/4	27	21	N/A			14	1 7/8	3 1/4	15	2 1/2	4	22	2 1/2	4	22	2 1/2	4	5 3/4	5'-5"
10'-5"	546	9	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			6	5	6 1/4	36	27	8	5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	10'-5"
11'-5"	546	9	5 1/8	7 7/8	6	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			7	5	6 1/4	36	26	8	5 1/8	7 7/8	N/A			5	4 1/2	6	N/A			8	5 1/2	8 1/2	6 7/8	11'-5"
12'-5"	546	9	5 1/8	7 7/8	5	4 1/2	6	5	4 5/8	7	5	4 1/2	6	8	5	7	N/A			6	5	6 1/4	36	24	7	5 1/8	7 7/8	N/A			5	3 3/4	5 1/2	N/A			7	5 1/2	8 1/2	6 7/8	12'-5"
13'-5"	546	8	5 1/8	7 7/8	N/A			N/A			N/A			7	5	7	N/A			N/A			33	22	7	5 1/8	7 7/8	N/A			N/A			N/A			6	5 1/2	8 1/2	6 7/8	13'-5"
14'-5"	546	7	5 1/8	7 7/8	N/A			N/A			N/A			6	5	7	N/A			N/A			31	20	N/A			N/A			N/A			N/A			6	5 1/2	8 1/2	6 7/8	14'-5"
15'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			28	18	N/A			N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	15'-5"
16'-5"	546	6	5 1/8	7 7/8	N/A			N/A			N/A			5	5	7	N/A			N/A			28	18	N/A			N/A			N/A			N/A			5	5 1/2	8 1/2	6 7/8	16'-5"
17'-5"	648	9	5 3/4	8 3/4	5	5 1/2	8	N/A			7	5 1/2	8	9	6 1/4	8 1/8	N/A			8	6 5/8	7 7/8	36	34	10	5 3/4	8 3/4	N/A			6	5 1/2	8	N/A			8	6 1/4	10	7 1/2	17'-5"
18'-5"	648	9	5 3/4	8 3/4	N/A			N/A			6	5 1/2	8	8	6 1/4	8 1/8	N/A			7	6 5/8	7 7/8	36	33	9	5 3/4	8 3/4	N/A			5	5 1/2	8	N/A			8	6 1/4	10	7 1/2	18'-5"
19'-5"	648	7	5 3/4	8 3/4	N/A			N/A			N/A			7	6 1/4	8 1/8	N/A			N/A			36	28	8	5 3/4	8 3/4	N/A			N/A			N/A			6	6 1/4	10	7 1/2	19'-5"
20'-5"	DC6	11	5 3/4	8 3/4	9	5 1/2	8	N/A			10	5 1/2	8	10	6 1/4	8 1/8	N/A			12	6 5/8	7 7/8	36	36	11	5 3/4	8 3/4	10	4 1/2	6	9	5 1/2	8	N/A			10	6 1/4	10	9 1/4	20'-5"

Guide Construction										Filled CMU																			Steel (Wall anchors are the same diameter as assembly fasteners)															
D.B.G. Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Flat Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt T22 Carbon & Stainless Steel			Powers Power-Stud+ SD1			Simpson Strong-Bolt 2			Hilti KH-EZ			Simpson Strong-Tie Titen			Hilti KH-EZ Stainless Steel			Simpson Strong-Tie Titen Stainless Steel			Through Bolting		Min. Edge Distance	Welded		Through Bolt			Tapped Bolt			Superimposed Loads				D.B.G. Up To
								Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.	Embed	Max O.C.	Dia.		Embed	Max O.C.	Dia.	Slot Max O.C.	Heel and Toe Max O.C.	Slot Size	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Carbon Steel - Max O.C.	Stainless Steel - Max O.C.	Min Thickness	Vx (+)	
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	10	3/8	3	10	5/8	3 3/8	13	5/8	4 3/8	18	3/8	3 1/4	13	5/8	4 1/2	18	3/8	3 1/4	13	5/8	4 1/2	8	3/8	4 9/16	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	224	0	221	4'-5"
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	8	5/8	4 1/2	N/A			8	3/4	5 1/4	10	3/8	3 1/4	N/A			10	3/8	3 1/4	N/A			8	3/8	5 3/4	36	36	7/16" x 5/8"	36	36	36	36	3/16	0	225	0	221	4'-5"
10'-5"	1 1/8	0.281	CP1152 & CP1153	546	6	5/8	14	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	9	12	11/16" x 7/8"	14	9	6	N/A	5/16	2495	528	2429	530	10'-5"
11'-5"	1 1/4	0.406	CP1152 & CP1153	546	6	5/8	14	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	9	13	11/16" x 7/8"	14	9	6	N/A	5/16	2463	576	2409	579	11'-5"
12'-5"	1 3/8	0.531	CP1152 & CP1153	546	6	5/8	13	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	9	12	11/16" x 7/8"	13	9	5	N/A	5/16	2525	625	2480	628	12'-5"
13'-5"	1 1/2	0.656	CP1152 & CP1153	546	6	5/8	12	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	5/8	6 7/8	8	12	11/16" x 7/8"	13	8	5	N/A	5/16	2625	674	2586	677	13'-5"
16'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	15	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2819	822	2786	823	16'-5"
17'-5"	2 1/4	1.406	CP1152 & CP1153	648	6	3/4	15	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2810	870	2783	871	17'-5"
18'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	14	N/A			N/A			N/A			N/A			N/A			N/A			N/A			8	3/4	7 1/2	12	13	7/8" x 1"	26	18	9	7	3/8	2832	918	2809	919	18'-5"

CP0020
