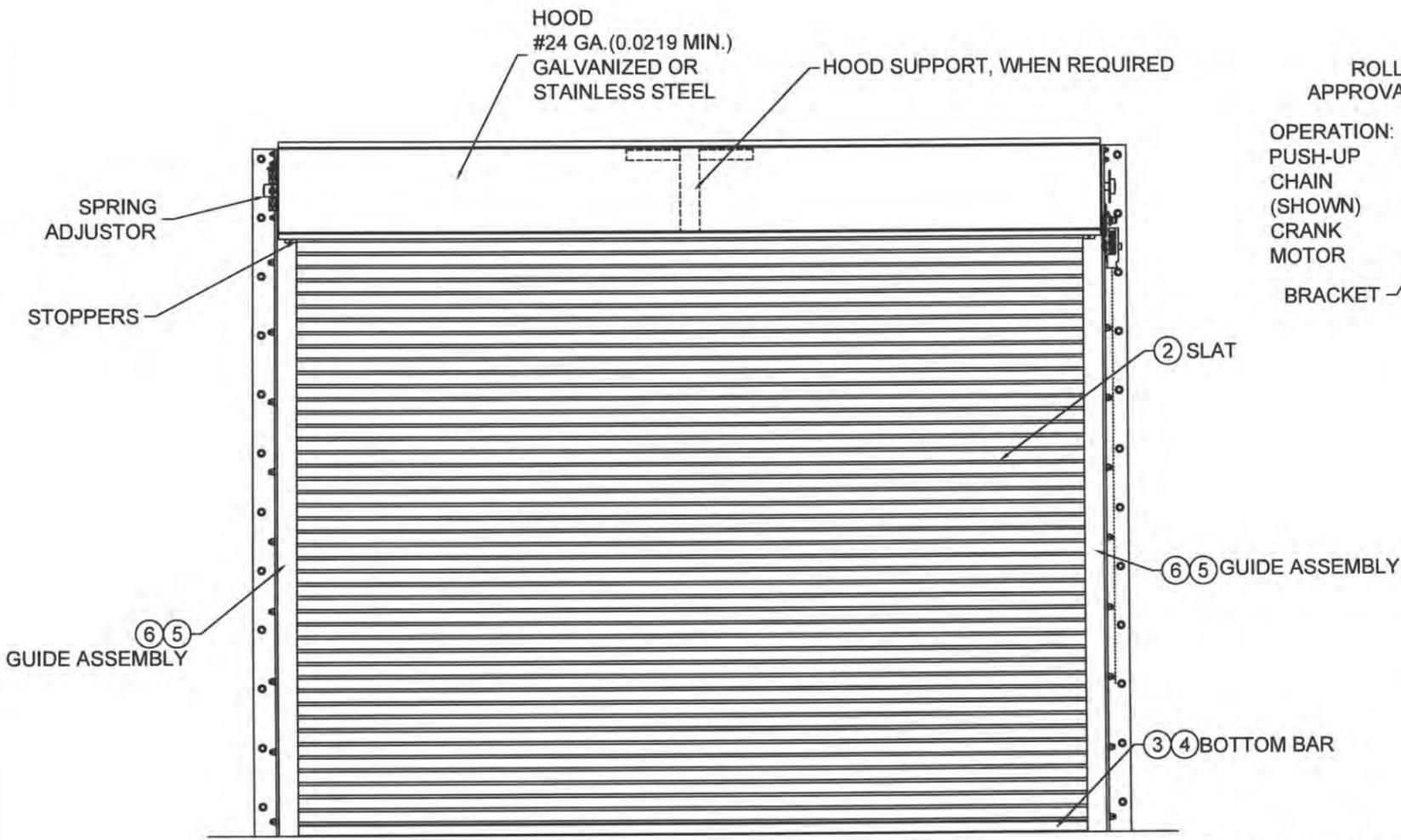
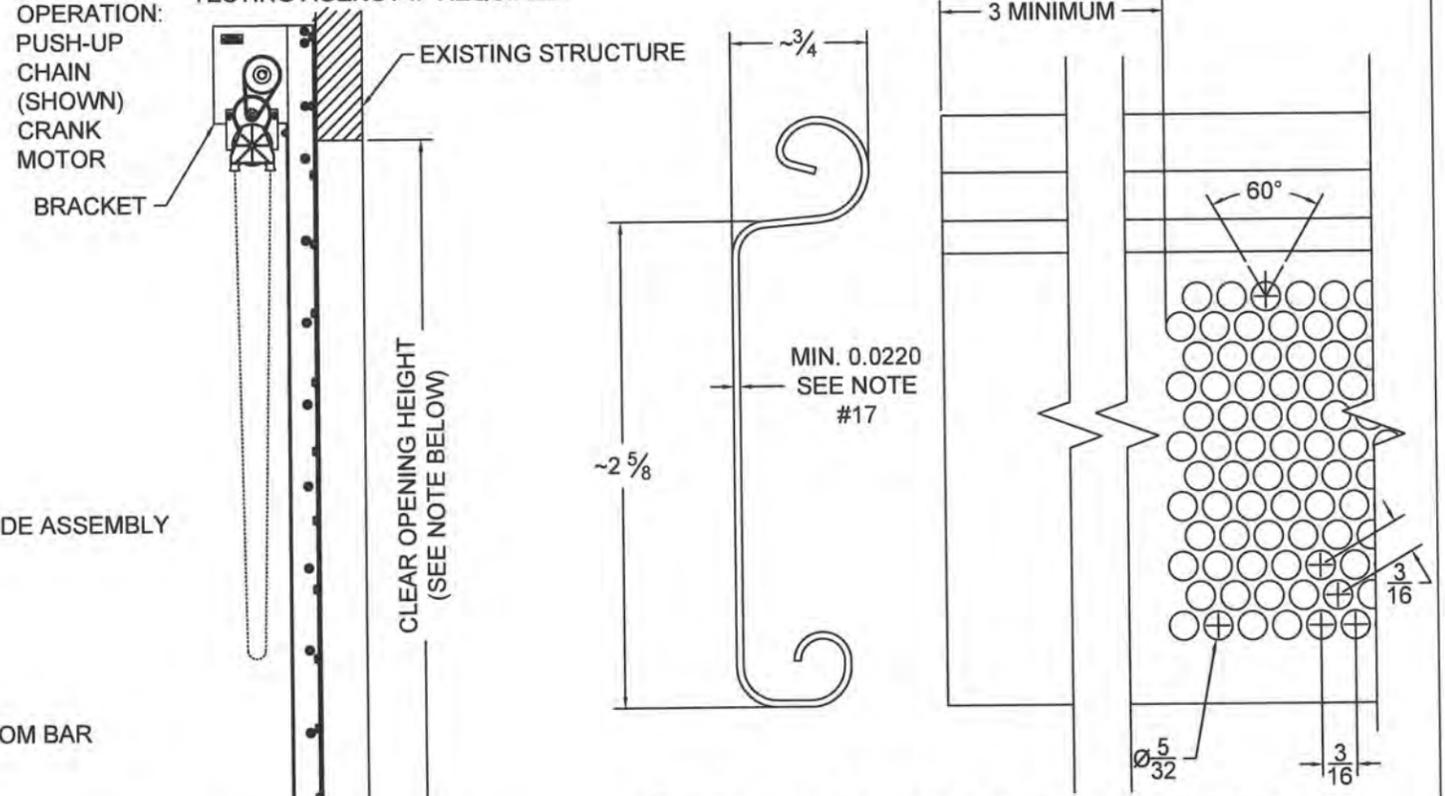


L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	09/30/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

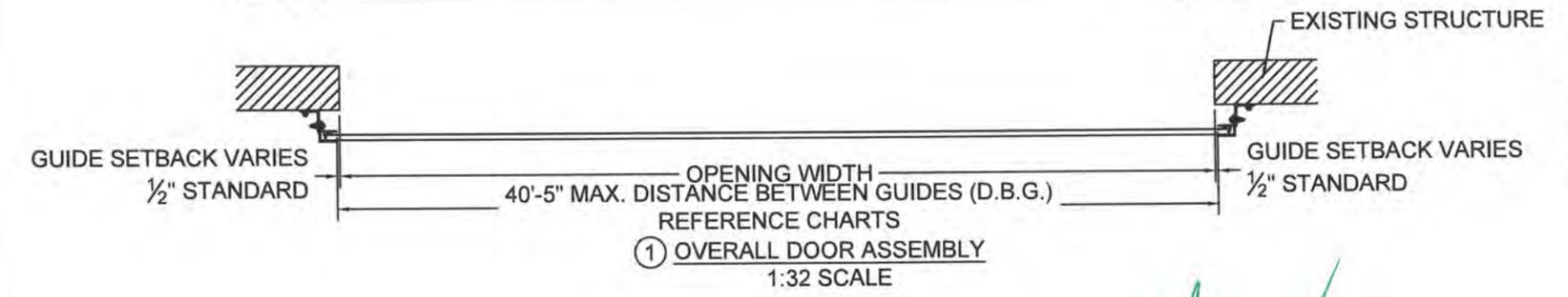


ROLL-UP MECHANISM NOT INCLUDED IN THIS APPROVAL. MUST BE CERTIFIED BY AN INDEPENDENT TESTING AGENCY IF REQUIRED.



② SLAT DETAIL & OPTIONAL PERFORATION PATTERN  
 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.

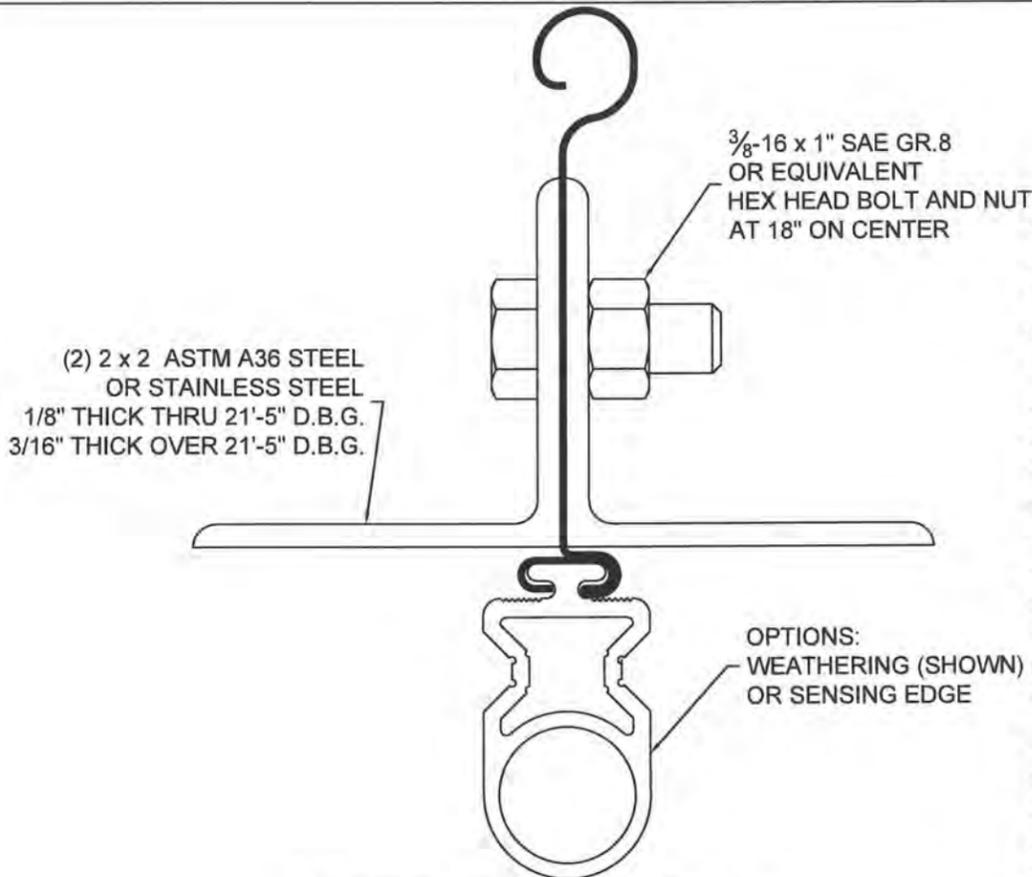


24 ELMWOOD AVE 1901 S. LITCHFIELD RD  
 MOUNTAINTOP, PA GOODYEAR, AZ  
 P: 800.233.8366  
 F: 800.526.0841  
 E: ADS@CORNELLIRON.COM

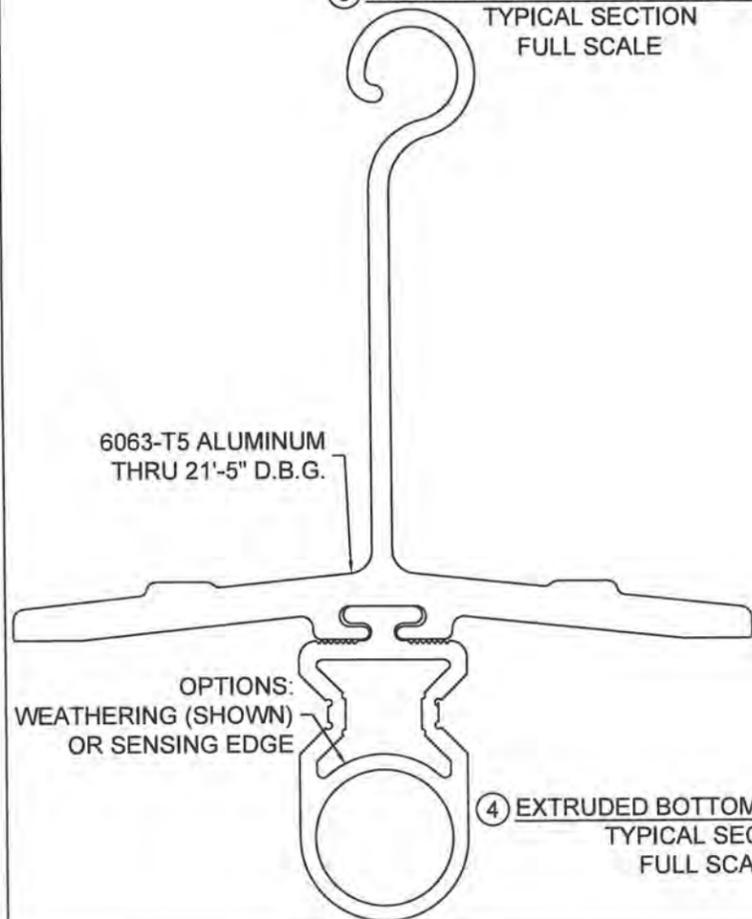
Unless otherwise specified, dimensions are in inches & tolerances are:  
 0.000 = +/- 0.031  
 FRACTIONAL = +/- 1/32  
 ANGLES = +/- 1/2 DEG

TITLE: <b>WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED</b>	DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: <b>AS NOTED</b>	SHEET: <b>1/53</b>
	DWG NO: <b>ES-16-62-CIW</b>			

L'TR	REVISION	DATE	BY	E.C.O.
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③ DOUBLE ANGLE BOTTOM BAR DETAIL  
TYPICAL SECTION  
FULL SCALE



④ EXTRUDED BOTTOM BAR DETAIL  
TYPICAL SECTION  
FULL SCALE

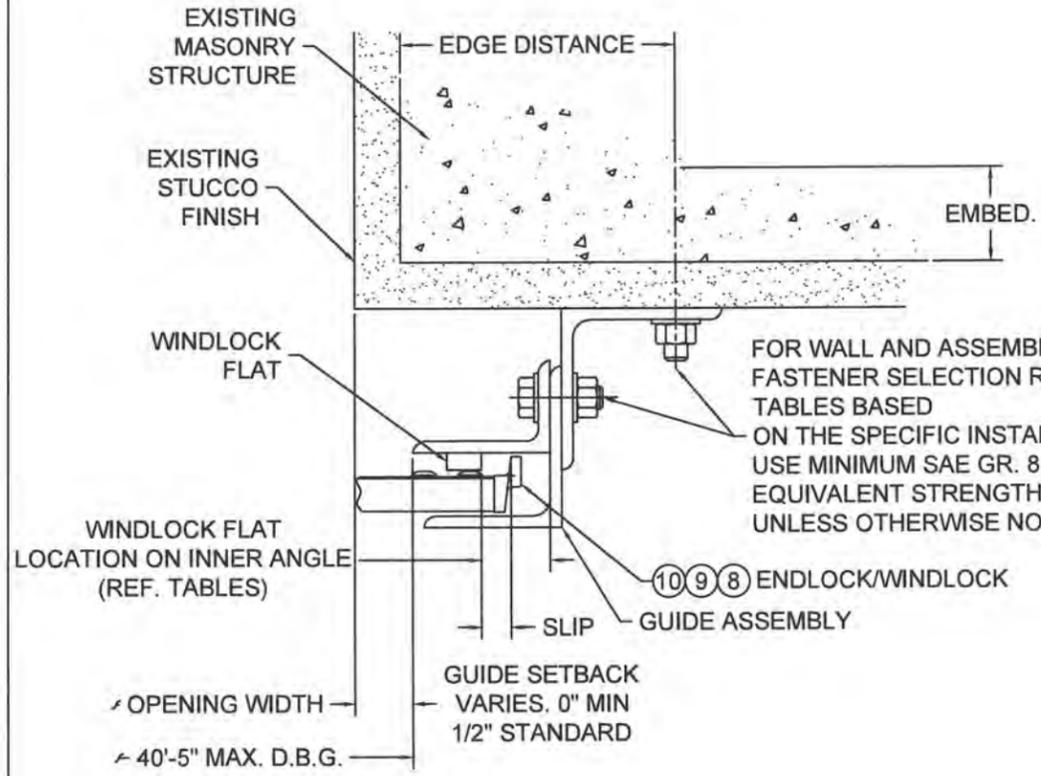
**GENERAL NOTES:**

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  $V_x$  &  $V_y$  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. 3,000 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. IF OPTIONAL PERFORATION PATTERN IS CHOSEN, MINIMUM SLAT THICKNESS IS 0.0405"
18. 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.



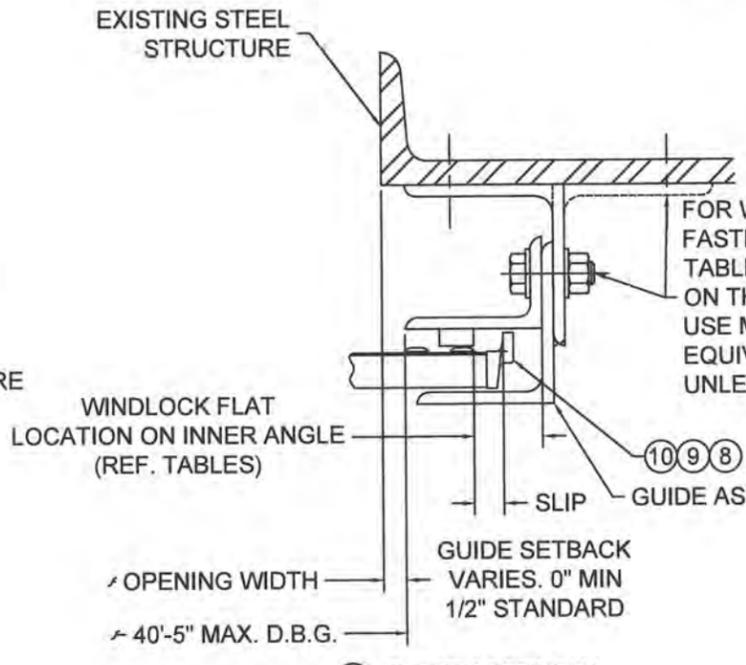
	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:  0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG	
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED	DRAWN BY: TJE DWG NO: ES-16-62-CIW
			SIZE: B SCALE: AS NOTED	SHEET: 2/53

LTR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	09/30/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

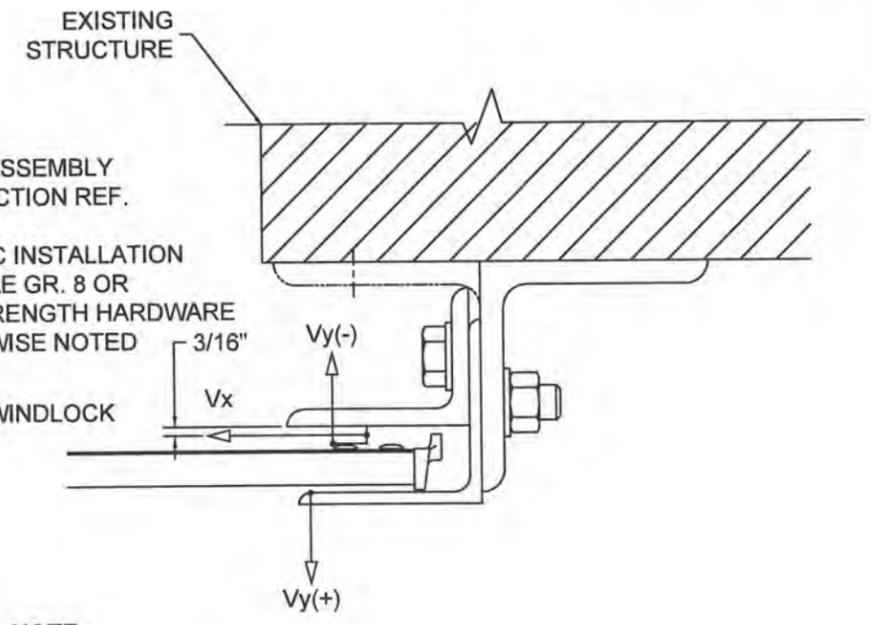


NOTE:  
THROUGH BOLTING TO FILLED BLOCK REQUIRES THE USE OF 1/4"  
THICK STEEL OR STAINLESS STEEL CRUSH PLATE

⑤ GUIDE ASSEMBLY  
CONCRETE OR FILLED BLOCK  
STRUCTURE  
(Z-GUIDE)



⑥ GUIDE ASSEMBLY  
STEEL STRUCTURE  
(Z-GUIDE OR E-GUIDE)



NOTE:

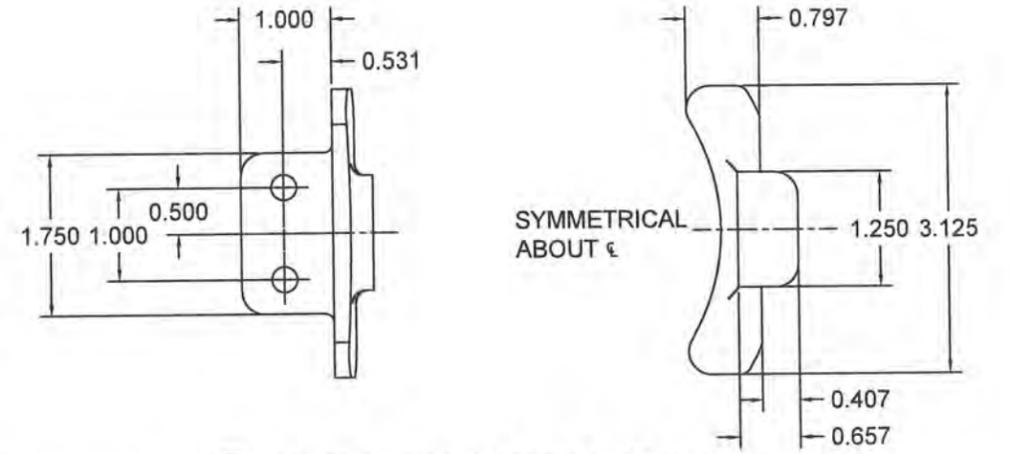
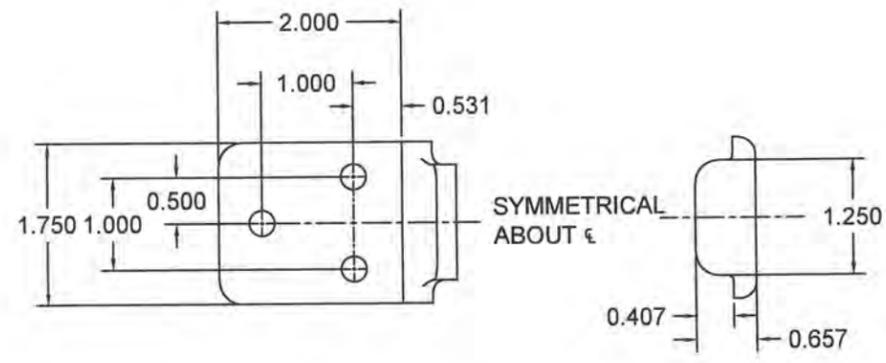
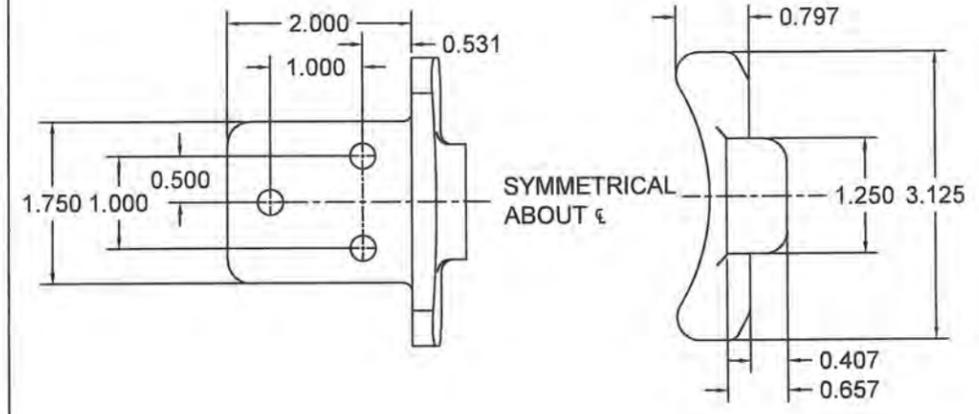
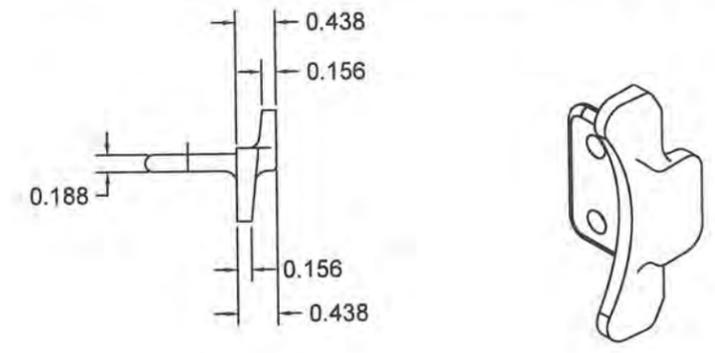
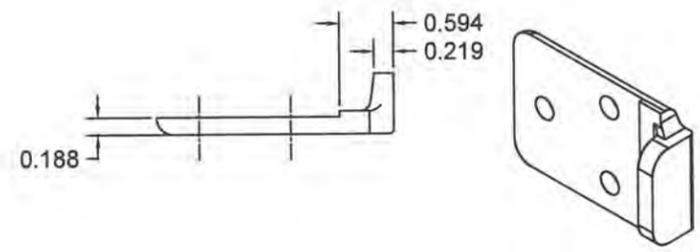
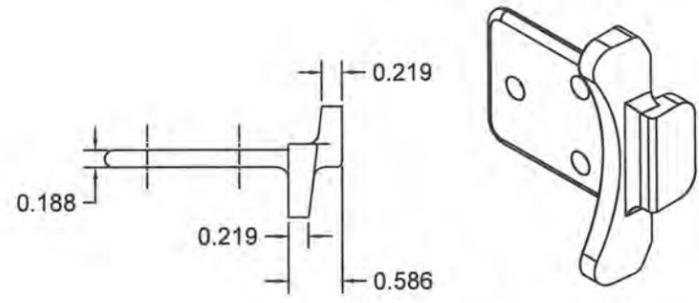
1.  $V_x$  &  $V_y$  ARE HORIZ. AND VERT. COMPONENTS OF THE REACTION, RESPECTIVELY, RESULTING FROM WIND LOADS ON THE ROLL-UP DOOR. THE EXISTING STRUCTURE SHALL BE CAPABLE OF RESISTING  $V_x$  &  $V_y$  FORCES SHOWN AND THE CORRESPONDING REACTIONS DUE TO THE ECCENTRICITIES OF THE FORCES.

⑦ SUPERIMPOSED LOAD DIAGRAM  
SCALE: 3" = 1'-0"



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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 NON-IMPACT RATED		DRAWN BY: TJE DWG NO: ES-16-62-CIW	SIZE: B SCALE: AS NOTED SHEET: 3/53

L'TR	REVISION	DATE	BY	E.C.O.
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A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027



⑧ 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

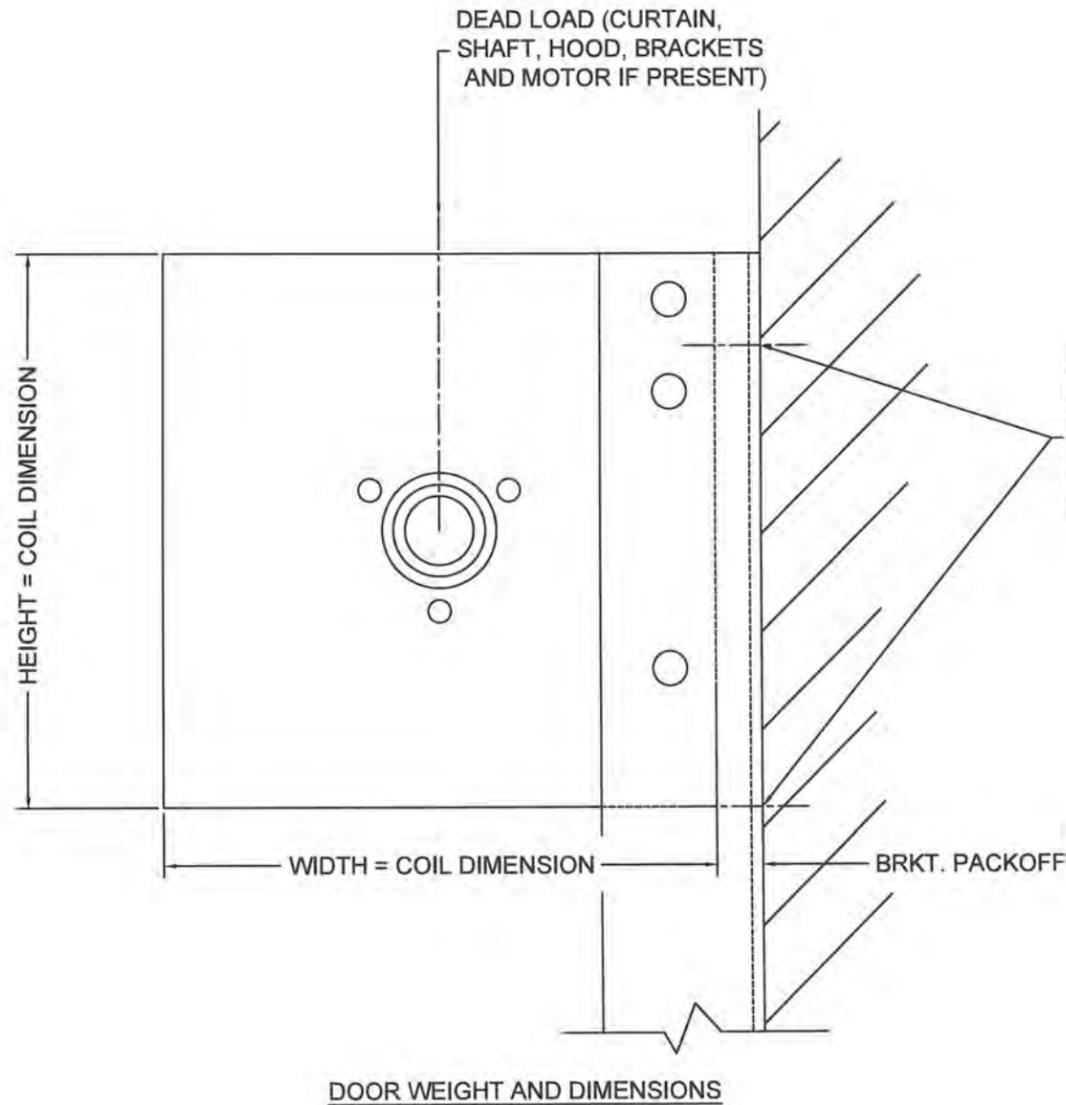
⑨ WINDLOCK DETAIL, CP1153  
 CAST MALLEABLE IRON ASTM A47, GRADE 32510, OR  
 DUCTILE IRON PER ASTM A536 GRADE 65-45-12, GALVANIZED IN  
 ACCORDANCE WITH ASTM A123, GRADE 85 ZINC-COATING  
 1/2 SCALE

⑩ 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

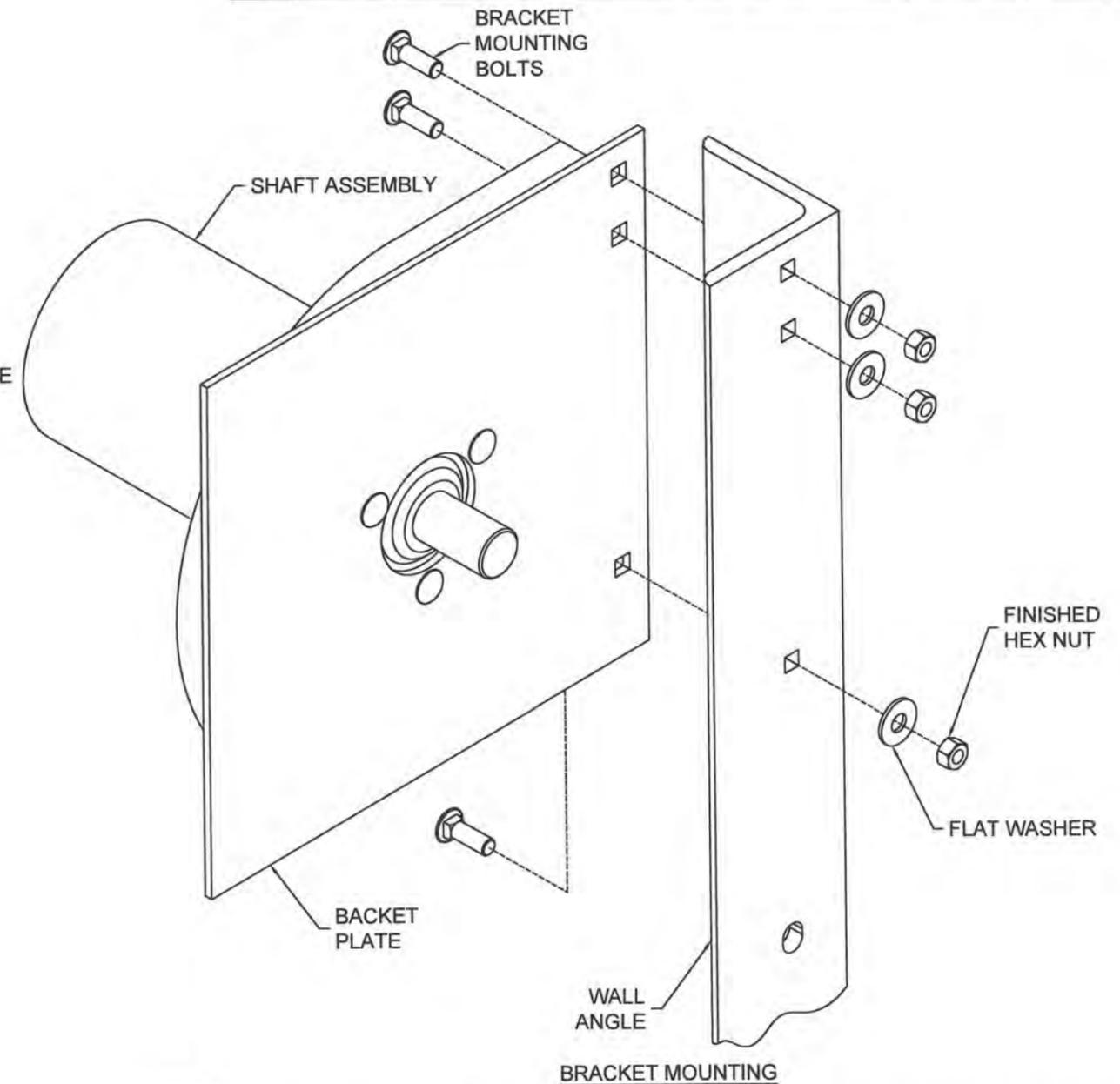


	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:  0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG		
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: <b>AS NOTED</b>
TITLE: <b>WIND LOAD CONFIGURATION          NON-INSULATED ROLLING STEEL DOOR          CP0020 SLAT NON-IMPACT RATED</b>			DWG NO: <b>ES-16-62-CIW</b>		

L'TR	REVISION	DATE	BY	E.C.O.
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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".

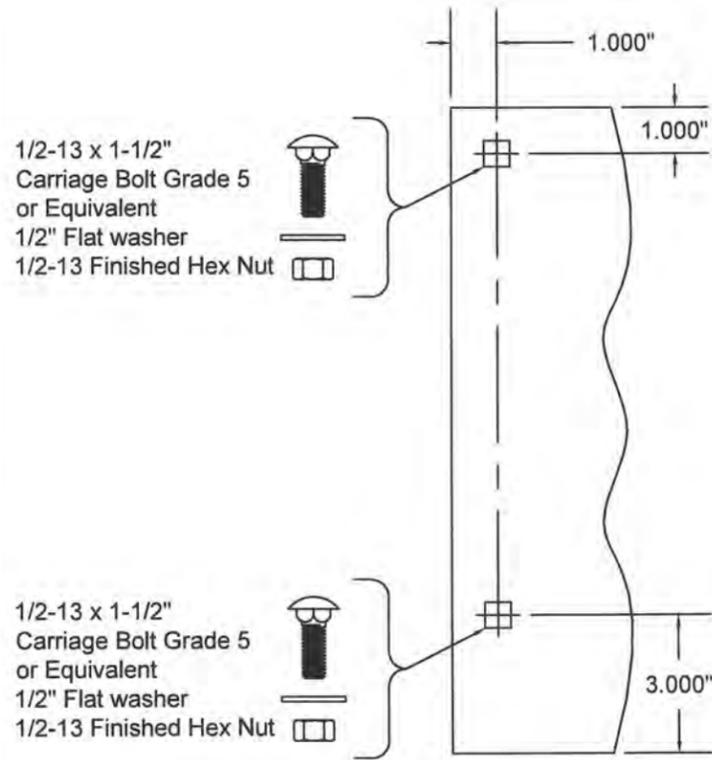
**NOTE:**

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



	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 NON-IMPACT RATED	DRAWN BY: TJE SIZE: B SCALE: AS NOTED SHEET: 5/53

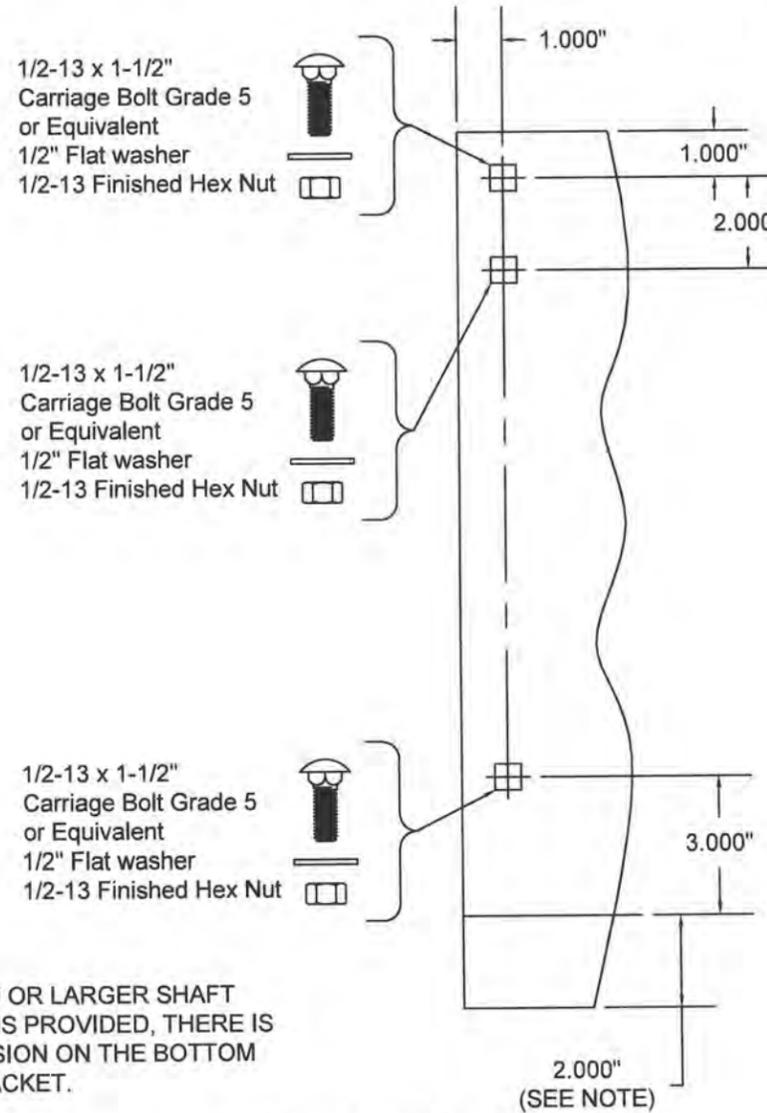
L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	09/30/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027



1/2-13 x 1-1/2"  
Carriage Bolt Grade 5  
or Equivalent  
1/2" Flat washer  
1/2-13 Finished Hex Nut

1/2-13 x 1-1/2"  
Carriage Bolt Grade 5  
or Equivalent  
1/2" Flat washer  
1/2-13 Finished Hex Nut

THRU 6"Ø SHAFT ASSEMBLY  
14" THRU 16" COIL DIMENSION  
MIN. THICKNESS 0.172" ASTM A36 STEEL  
OR ASTM A480 STAINLESS STEEL,  
TYPES 304 OR 316, MIN. 36 KSI YIELD STRENGTH  
SCALE: 1-1/2" = 1'-0"



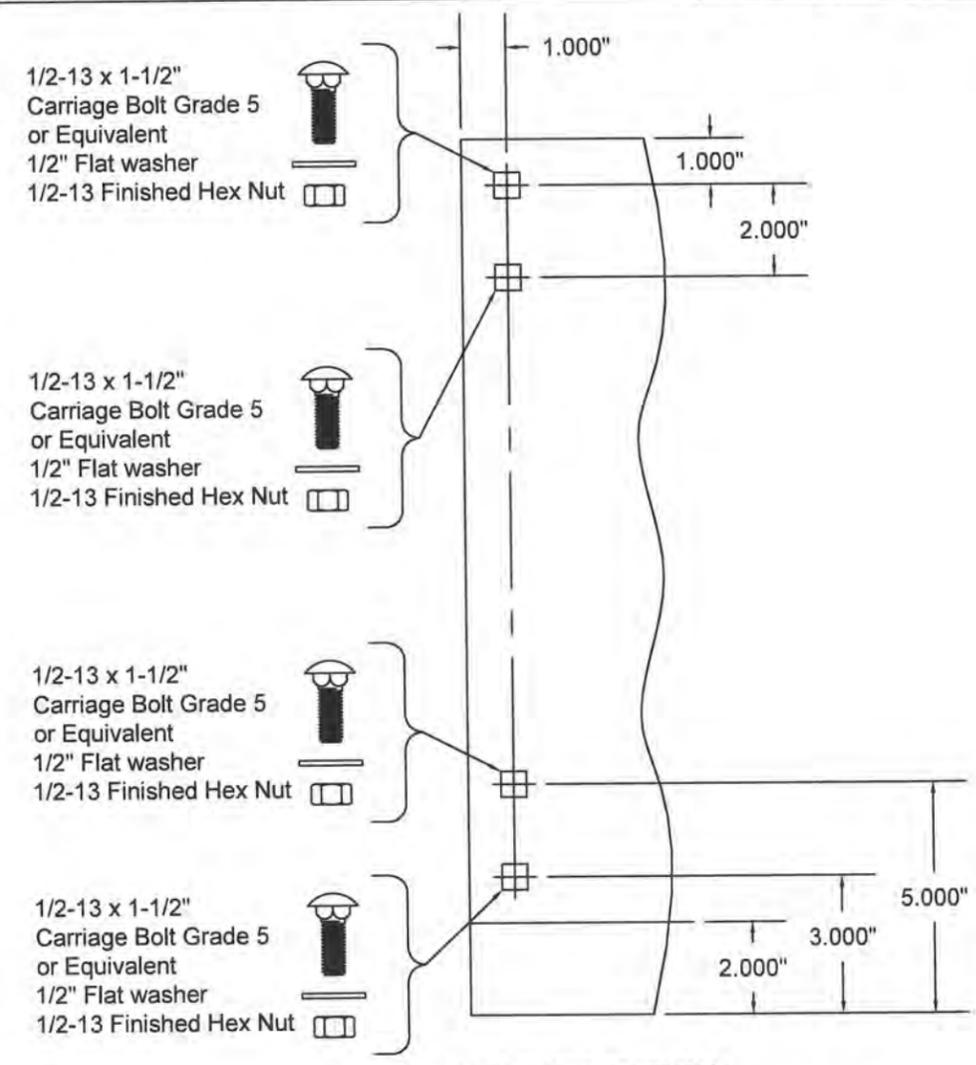
1/2-13 x 1-1/2"  
Carriage Bolt Grade 5  
or Equivalent  
1/2" Flat washer  
1/2-13 Finished Hex Nut

1/2-13 x 1-1/2"  
Carriage Bolt Grade 5  
or Equivalent  
1/2" Flat washer  
1/2-13 Finished Hex Nut

1/2-13 x 1-1/2"  
Carriage Bolt Grade 5  
or Equivalent  
1/2" Flat washer  
1/2-13 Finished Hex Nut

NOTE:  
WHEN A 8"Ø OR LARGER SHAFT  
ASSEMBLY IS PROVIDED, THERE IS  
A 2" EXTENSION ON THE BOTTOM  
OF THE BRACKET.

THRU 10"Ø SHAFT ASSEMBLY  
17" AND LARGER COIL DIMENSION  
MIN. THICKNESS 0.240" ASTM A36 STEEL  
OR ASTM A480 STAINLESS STEEL,  
TYPES 304 OR 316, MIN. 36 KSI YIELD STRENGTH  
SCALE: 1-1/2" = 1'-0"



1/2-13 x 1-1/2"  
Carriage Bolt Grade 5  
or Equivalent  
1/2" Flat washer  
1/2-13 Finished Hex Nut

1/2-13 x 1-1/2"  
Carriage Bolt Grade 5  
or Equivalent  
1/2" Flat washer  
1/2-13 Finished Hex Nut

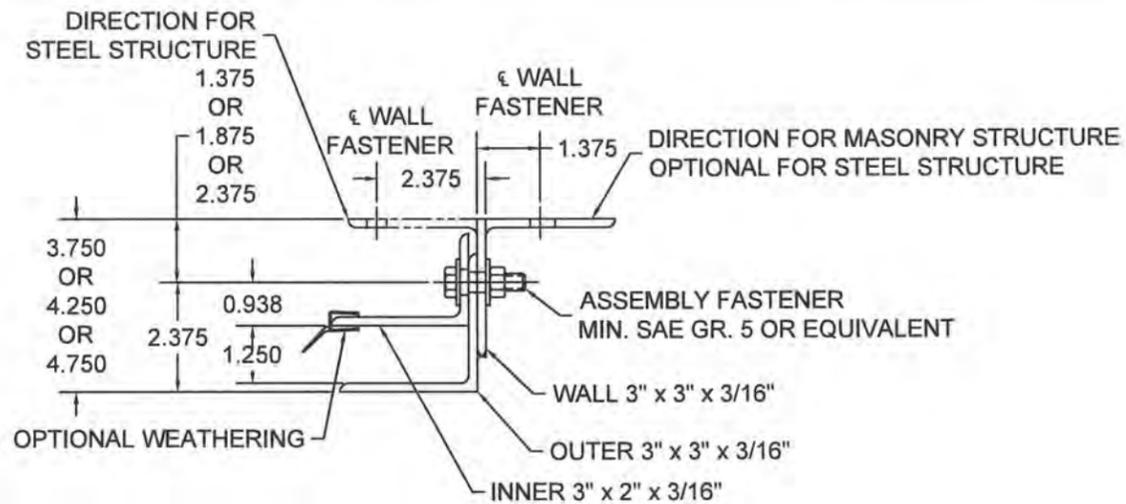
1/2-13 x 1-1/2"  
Carriage Bolt Grade 5  
or Equivalent  
1/2" Flat washer  
1/2-13 Finished Hex Nut

1/2-13 x 1-1/2"  
Carriage Bolt Grade 5  
or Equivalent  
1/2" Flat washer  
1/2-13 Finished Hex Nut

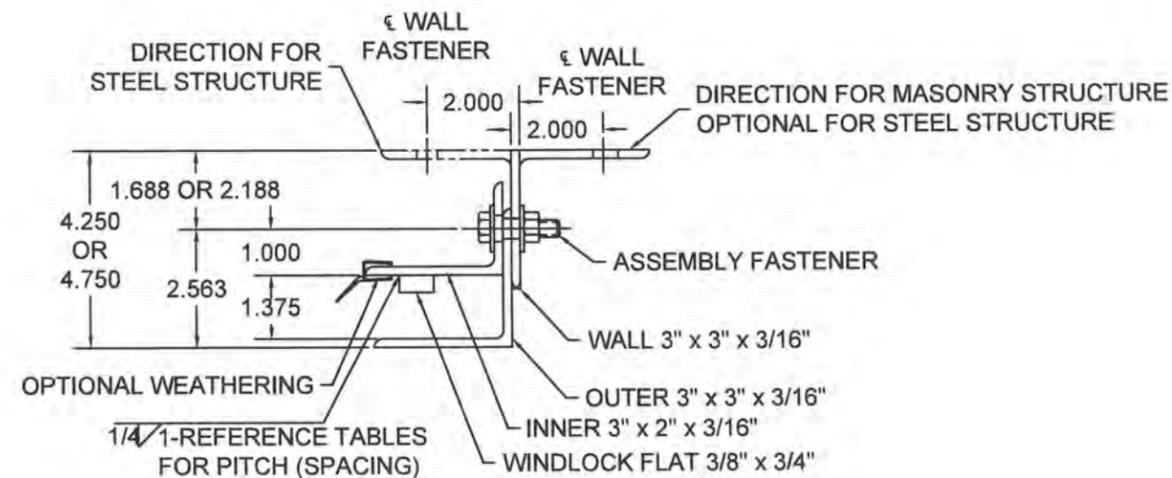
12"Ø SHAFT ASSEMBLY  
17" AND LARGER COIL DIMENSION  
MIN. THICKNESS 0.240" ASTM A36 STEEL  
OR ASTM A480 STAINLESS STEEL,  
TYPES 304 OR 316, MIN. 36 KSI YIELD STRENGTH  
SCALE: 1-1/2" = 1'-0"



	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		DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: <b>AS NOTED</b>
TITLE: <b>WIND LOAD CONFIGURATION</b> <b>NON-INSULATED ROLLING STEEL DOOR</b> <b>CP0020 SLAT NON-IMPACT RATED</b>			DWG NO: <b>ES-16-62-CIW</b>		



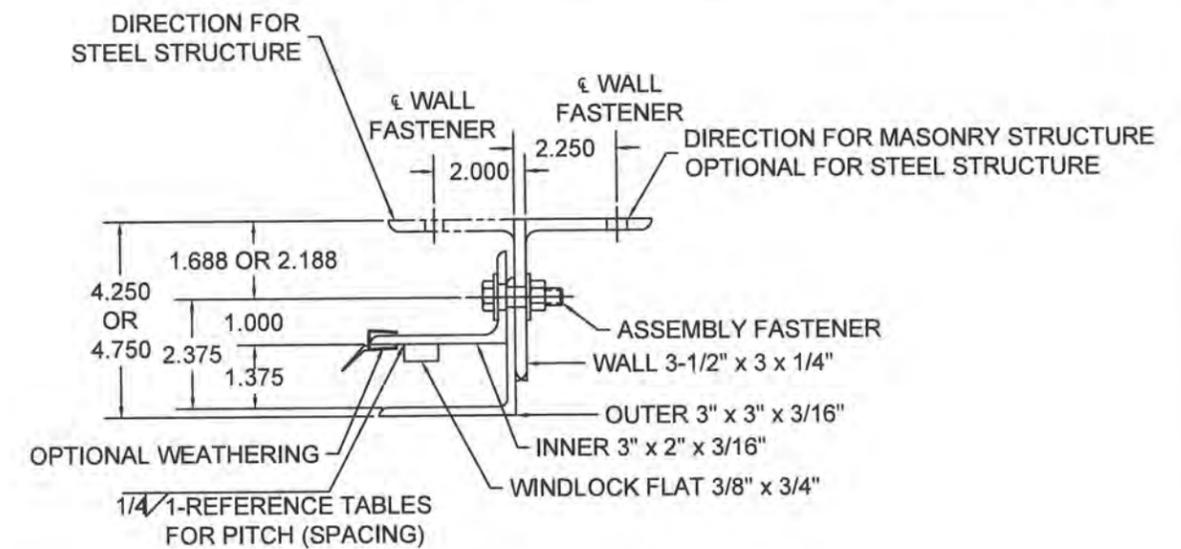
GUIDE ASSEMBLY TYPE 333\* (NON-WINDLOCK)  
SCALE: 3" = 1'-0"



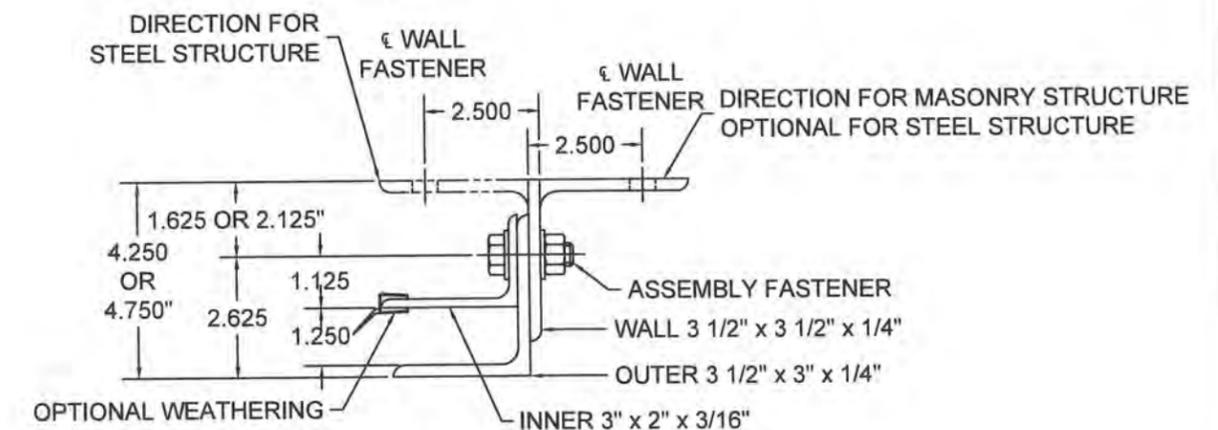
GUIDE ASSEMBLY TYPE 333  
SCALE: 3" = 1'-0"



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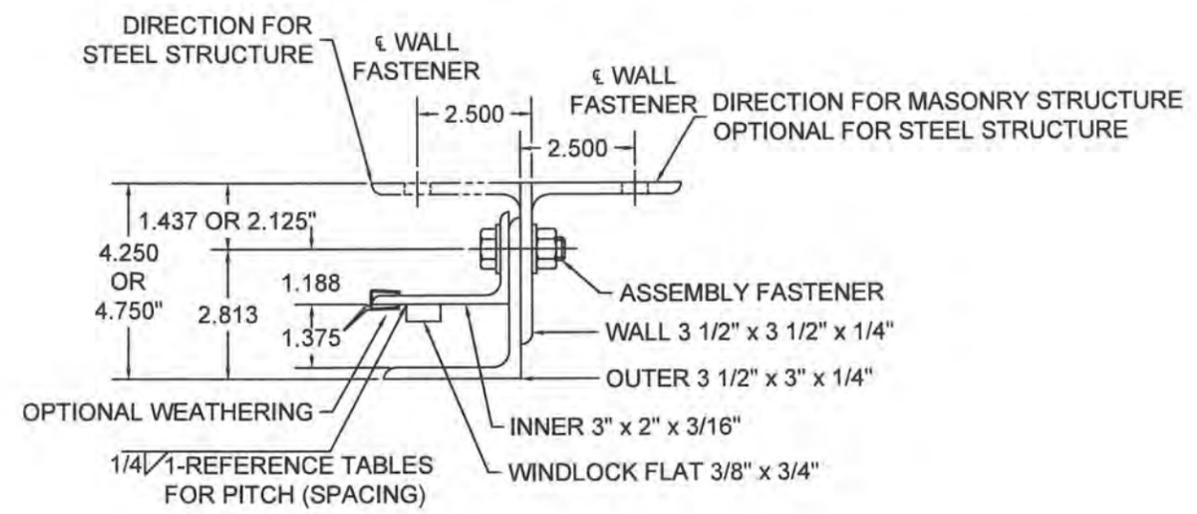
GUIDE ASSEMBLY TYPE 334  
SCALE: 3" = 1'-0"



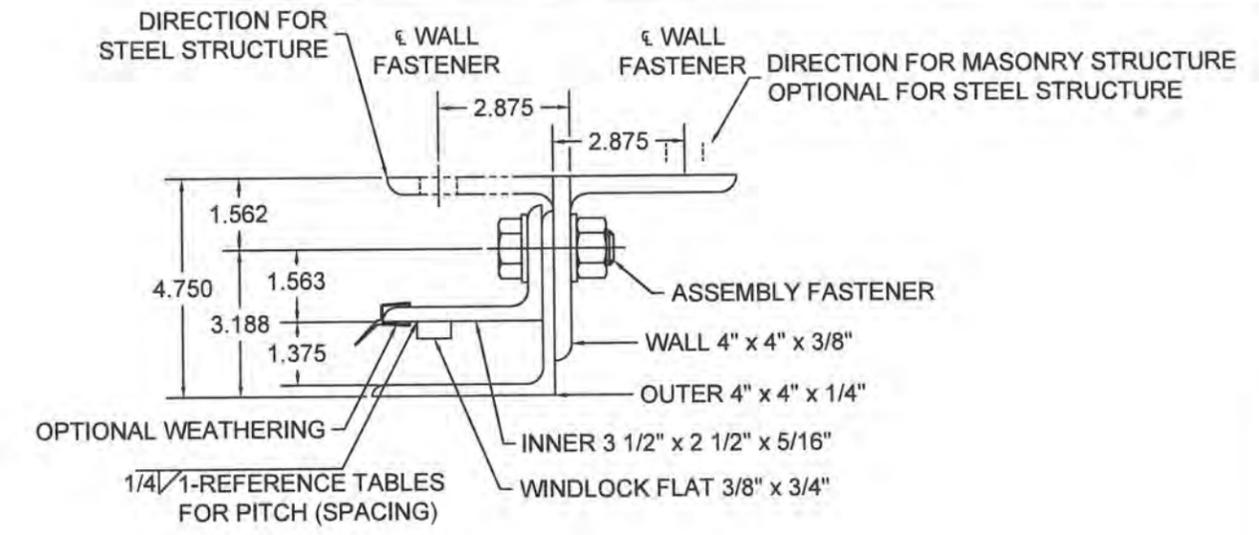
GUIDE ASSEMBLY TYPE 344\* (NON-WINDLOCK)  
SCALE: 3" = 1'-0"

	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 NON-IMPACT RATED		DRAWN BY: TJE SIZE: B SCALE: AS NOTED SHEET: 7/53
		DWG NO: ES-16-62-CIW

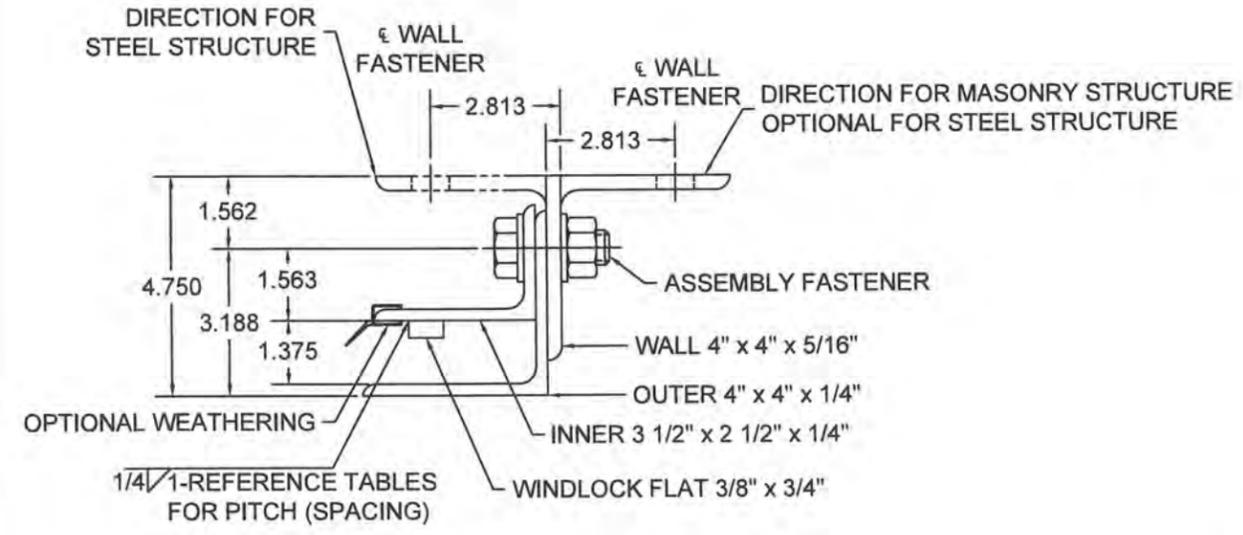
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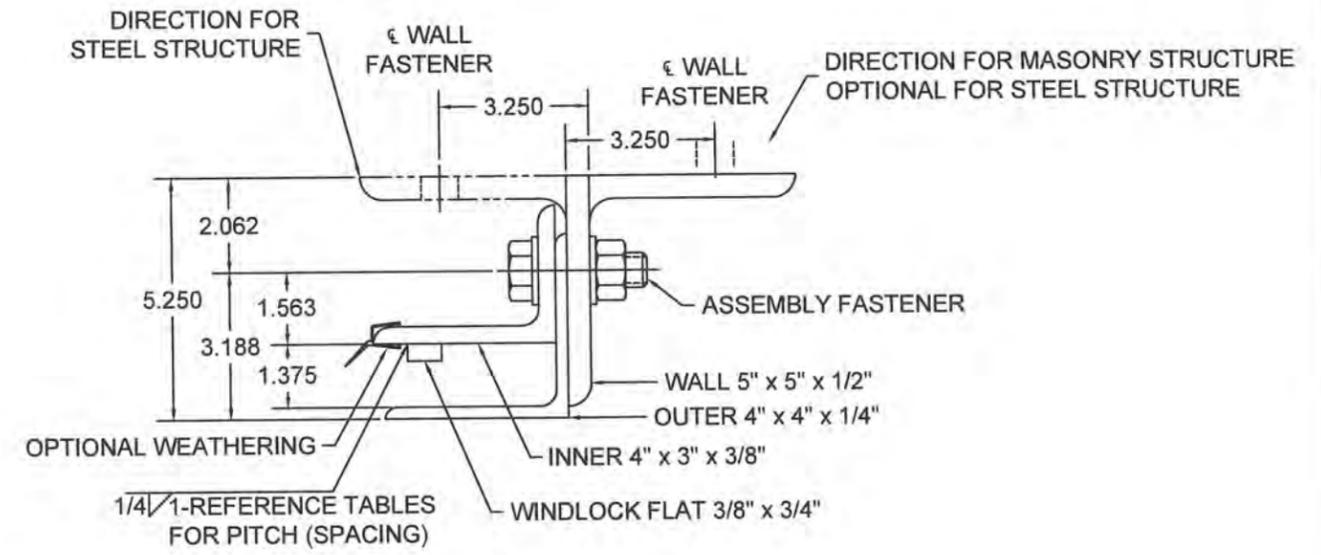
GUIDE ASSEMBLY TYPE 344  
SCALE: 3" = 1'-0"



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



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

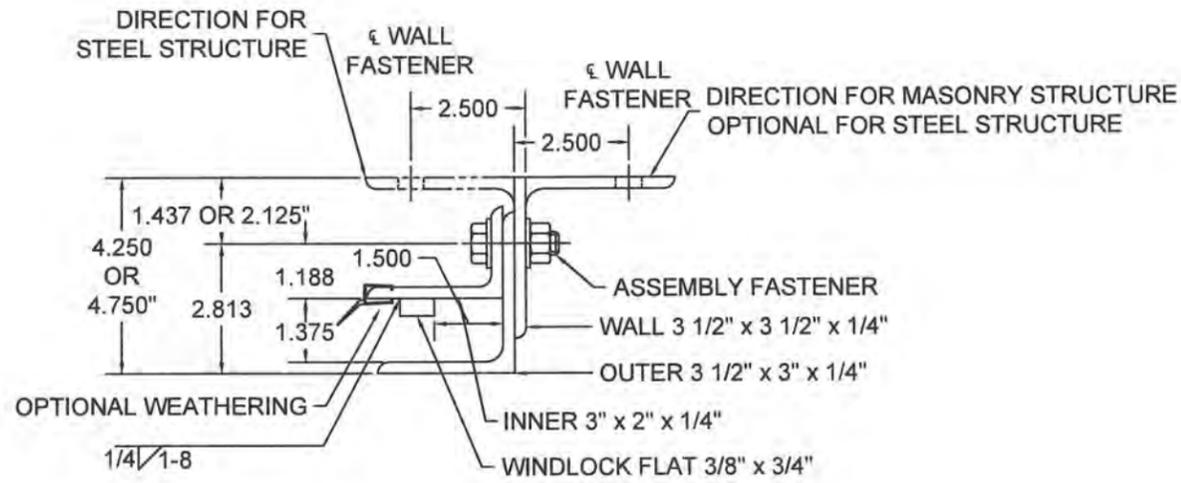


GUIDE ASSEMBLY TYPE 648  
SCALE: 3" = 1'-0"

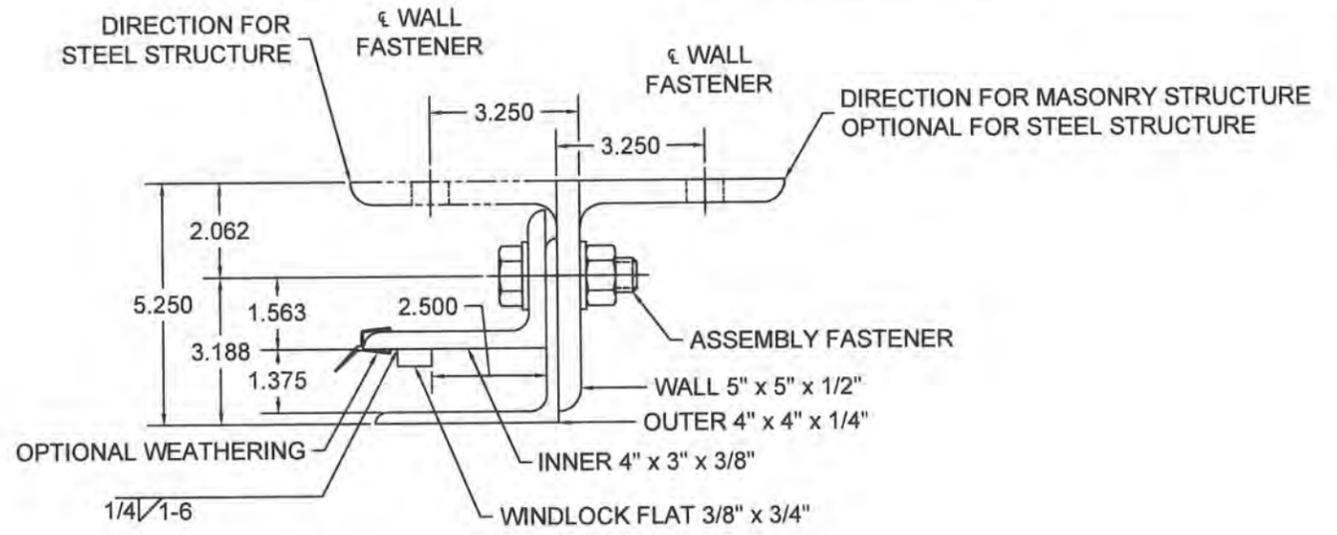


	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:			
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG			
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED			DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: AS NOTED	SHEET: <b>8/53</b>
			DWG NO: <b>ES-16-62-CIW</b>			

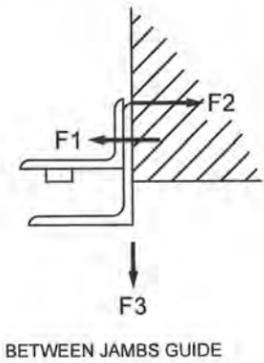
L'TR	REVISION	DATE	BY	E.C.O.
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GUIDE ASSEMBLY TYPE DC 1  
SCALE: 3" = 1'-0"

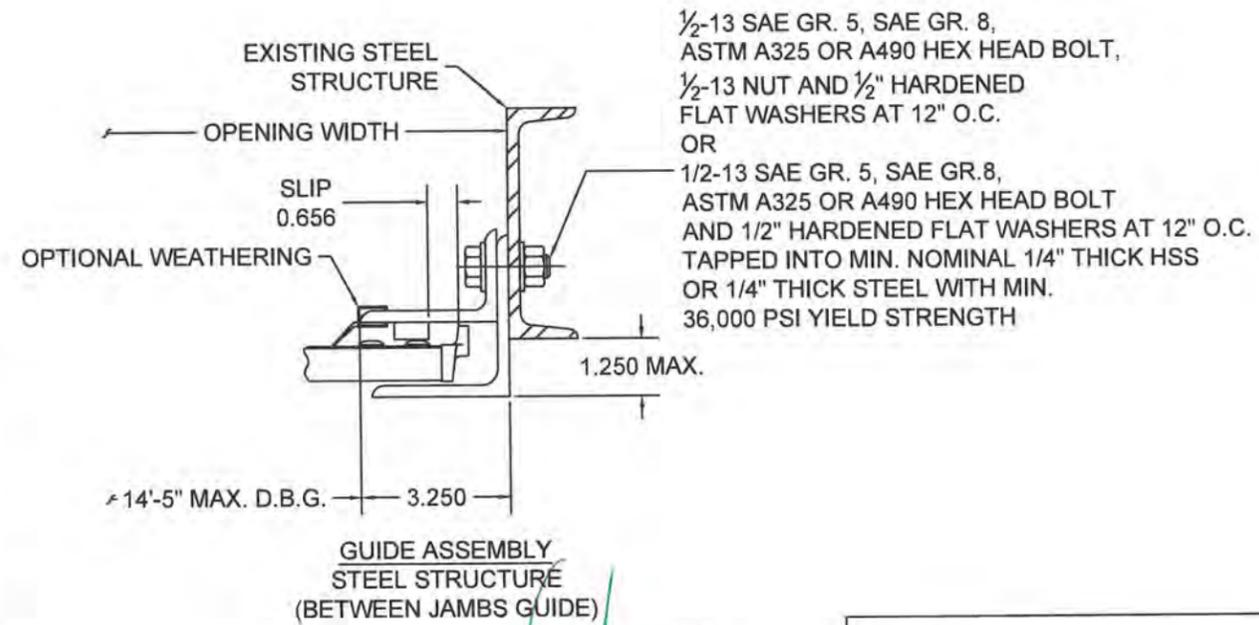


GUIDE ASSEMBLY TYPE DC 2 & DC 3  
SCALE: 3" = 1'-0"



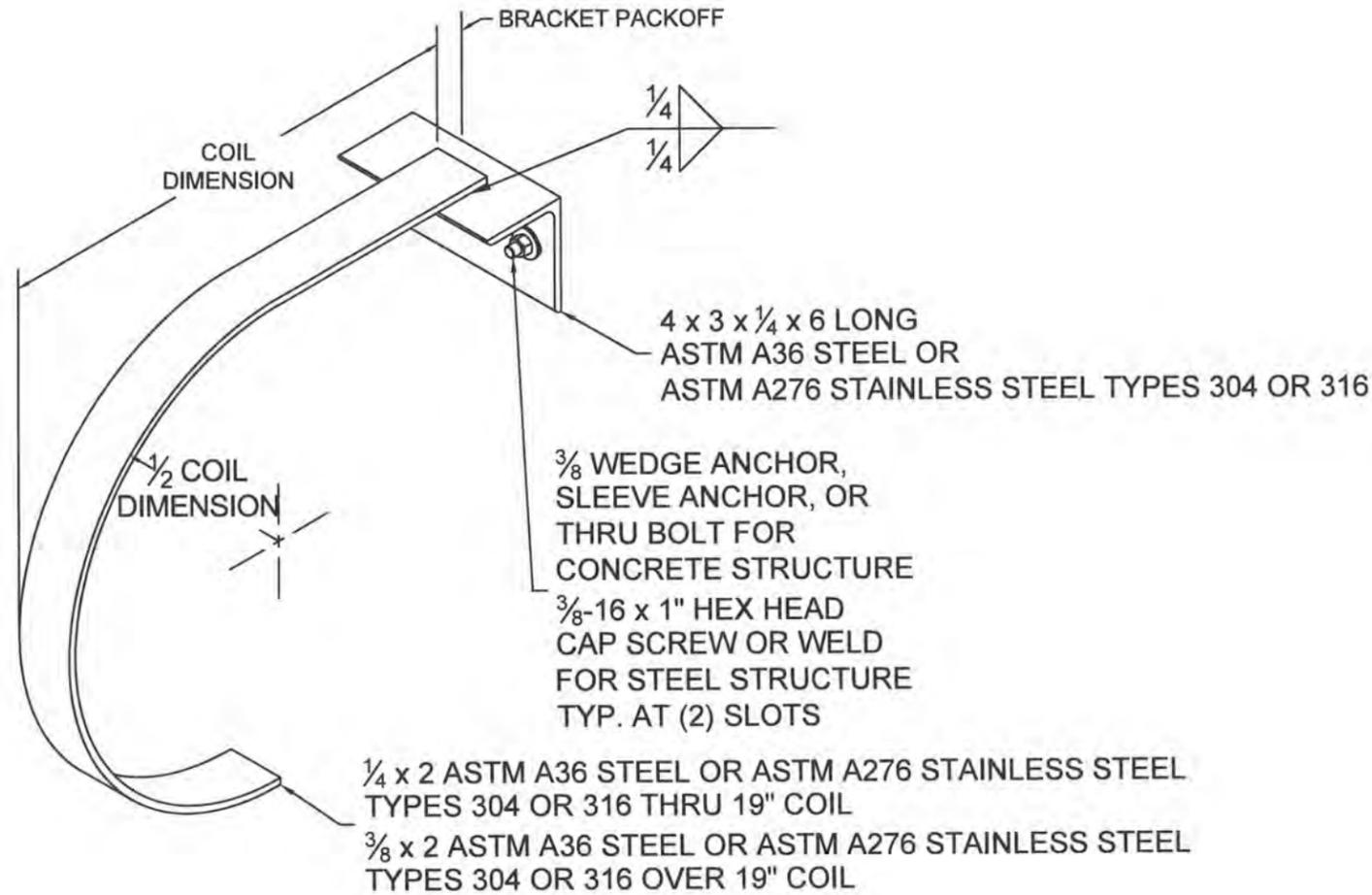
UNREDUCED WIND FORCES ON BUILDING STRUCTURE (LBS / FOOT OF HEIGHT)					
BETWEEN JAMBS GUIDE (14'-5" MAX. D.B.G.)					
POSITIVE			NEGATIVE		
F1	F2	F3	F1	F2	F3
3745	1832	478	8004	6091	478

**BUILDING DESIGNER NOTE:**  
STRUCTURE MUST BE DESIGNED TO SUPPORT F1, F2, AND F3 FORCES (LBS./FT. OF OPENING HEIGHT) AT EACH JAMB.



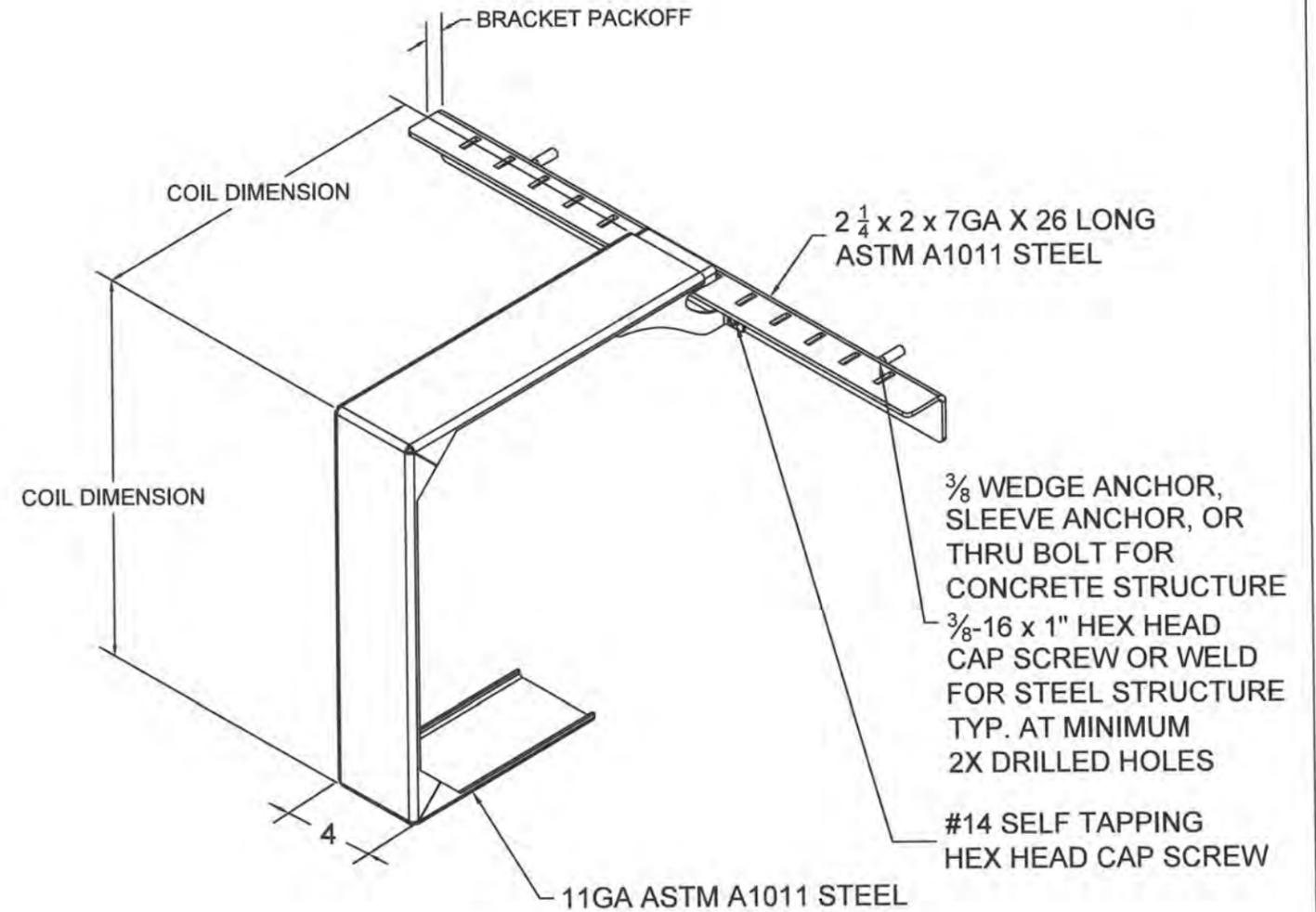
	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:  0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG	
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED	DRAWN BY: TJE SIZE: B SCALE: AS NOTED SHEET: 9/53 DWG NO: ES-16-62-CIW

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	09/30/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027



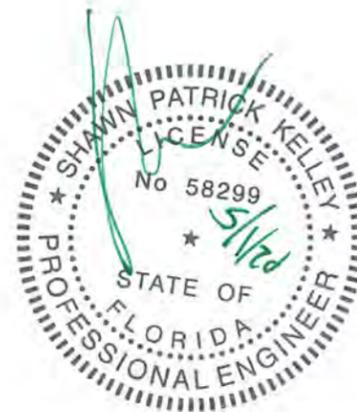
**MID-HOOD SUPPORT**  
(WHEN REQUIRED)

"D" SHAPE DEPICTED, SQUARE STYLE ALSO AVAILABLE  
SCALE: NTS



**MID-HOOD SUPPORT**  
(WHEN REQUIRED)

SQUARE STYLE DEPICTED, "D" SHAPE ALSO AVAILABLE  
SCALE: NTS



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ	Unless otherwise specified, dimensions are in inches & tolerances are:			
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM	0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG			
<b>TITLE:</b> WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED		<b>DRAWN BY:</b> TJE	<b>SIZE:</b> B	<b>SCALE:</b> AS NOTED	<b>SHEET:</b> 10/53
		<b>DWG NO:</b> ES-16-62-CIW			

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 20 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
7'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	36	2 5/8	3 15/16	4 9/16	36	3	4 1/2	4 9/16	36	2	3	4 9/16
7'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	28	2 5/8	3 15/16	5 3/4	28	3	4 1/2	5 3/4	22	2	3	5 3/4
12'-5"	1 5/16	0.532	CP1151	333	12	3/8	18	36	2 3/8	4	5 3/16	15	2 5/8	3 15/16	5 3/16	16	3	4 1/2	5 3/16	10	2	3	5 3/16
12'-5"	1 5/16	0.532	CP1151	344	12	1/2	18	36	2 1/4	4	5 3/4	36	4 1/2	6 3/4	5 3/4	30	4 1/8	6 3/16	5 3/4	16	2 1/2	3 3/4	5 3/4
13'-5"	1 7/16	0.657	CP1151	333	12	3/8	18	36	2 3/8	4	5 3/16	14	2 5/8	3 15/16	5 3/16	14	3	4 1/2	5 3/16	8	2	3	5 3/16
13'-5"	1 7/16	0.657	CP1151	344	12	1/2	18	36	2 1/4	4	5 3/4	33	4 1/2	6 3/4	5 3/4	26	4 1/8	6 3/16	5 3/4	14	2 1/2	3 3/4	5 3/4
14'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	12	2 3/8	4	5 3/16	11	2 5/8	3 15/16	5 3/16	12	3	4 1/2	5 3/16	7	2	3	5 3/16
14'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	22	2 1/4	4	5 3/4	28	4 1/2	6 3/4	5 3/4	22	4 1/8	6 3/16	5 3/4	12	2 1/2	3 3/4	5 3/4
15'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	N/A				10	2 5/8	3 15/16	5 3/16	10	3	4 1/2	5 3/16	6	2	3	5 3/16
15'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	23	4 1/2	6 3/4	5 3/4	19	4 1/8	6 3/16	5 3/4	10	2 1/2	3 3/4	5 3/4
16'-5"	1 1/2	0.719	CP1151	334	12	3/8	16	N/A				9	2 5/8	3 15/16	5 7/16	9	3	4 1/2	5 7/16	5	2	3	5 7/16
16'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	20	4 1/2	6 3/4	5 3/4	16	4 1/8	6 3/16	5 3/4	9	2 1/2	3 3/4	5 3/4
17'-5"	1 1/2	0.719	CP1151	334	12	3/8	14	N/A				8	2 5/8	3 15/16	5 7/16	8	3	4 1/2	5 7/16	5	2	3	5 7/16
17'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	17	4 1/2	6 3/4	5 3/4	14	4 1/8	6 3/16	5 3/4	8	2 1/2	3 3/4	5 3/4
18'-5"	1 1/2	0.719	CP1151	334	11	3/8	13	N/A				7	2 5/8	3 15/16	5 7/16	7	3	4 1/2	5 7/16	4	2	3	5 7/16
18'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	16	4 1/2	6 3/4	5 3/4	13	4 1/8	6 3/16	5 3/4	7	2 1/2	3 3/4	5 3/4
19'-5"	1 1/2	0.656	CP1152	334	10	3/8	11	N/A				6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	4	2 1/2	3 3/4	5 7/16
19'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	28	3 5/8	6	5 3/4	13	4 1/2	6 3/4	5 3/4	11	4 1/8	6 3/16	5 3/4	6	2 1/2	3 3/4	5 3/4
20'-5"	1 1/2	0.656	CP1152	334	10	3/8	10	N/A				5	2 5/8	3 15/16	5 7/16	N/A				4	2 1/2	3 3/4	5 7/16
20'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	36	3 5/8	8	5 3/4	12	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
21'-5"	1 1/2	0.656	CP1152	334	9	3/8	9	N/A				5	2 5/8	3 15/16	5 7/16	N/A				6	3 1/2	5 1/4	5 7/16
21'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	28	3 5/8	8	5 3/4	11	4 1/2	6 3/4	5 3/4	9	4 1/8	6 3/16	5 3/4	7	3 1/2	5 1/4	5 3/4
22'-5"	2	1.156	CP1152	444	10	5/8	18	36	4 3/8	6	6 1/4	17	4 1/2	6 3/4	6 1/4	15	5 1/8	7 11/16	6 1/4	11	4	6	6 1/4
23'-5"	2	1.156	CP1152	444	10	5/8	18	36	4 3/8	6	6 1/4	16	4 1/2	6 3/4	6 1/4	14	5 1/8	7 11/16	6 1/4	10	4	6	6 1/4
24'-5"	2	1.156	CP1152	444	10	5/8	18	22	4 3/8	6	6 1/4	15	4 1/2	6 3/4	6 1/4	13	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
25'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	6	7 5/16	16	4 1/2	6 3/4	7 5/16	15	7 1/2	11 1/4	7 5/16	11	4	6	7 5/16
26'-5"	2	1.156	CP1152	445	9	5/8	18	28	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	14	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
27'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
28'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
29'-5"	2	1.156	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
30'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	22	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
31'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
32'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
33'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A				10	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
34'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
35'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
36'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
37'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
38'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
39'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
40'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			



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 NON-IMPACT RATED

DRAWN BY: TJE  
SIZE: B  
SCALE: AS NOTED  
SHEET: 11/53  
DWG NO: ES-16-62-CIW

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/15/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 20 PSF, Cont.																																			
DBG Up To	Filled CMU												Cracked Concrete Minimum 3,000 PSI Compressive Strength												Steel (Wall anchors are the same diameter as assembly fasteners)				Superimposed Loads						
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Hilti Kwik Bolt TZ				Simpson Strong-Bolt 2				ITW Redhead Trubolt+				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)		
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Distance	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size	Max O.C.					Max O.C.	Min. Thickness
7'-5"	11	3/8	1 5/8	4 9/16	19	3/8	2 5/8	4 9/16	36	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	36	3/8	1 7/8	3 1/4	4 9/16	36	3/8	2	4	4 9/16	36	7/16 x 5/8	36	36	3/16	0	75	0	75
7'-5"	16	3/8	2 1/2	5 3/4	11	3/8	2 5/8	5 3/4	28	3/8	5 3/4	36	3/8	2 5/16	4	5 3/4	36	3/8	1 7/8	3 1/4	5 3/4	36	3/8	2	5	5 3/4	36	7/16 x 5/8	36	36	3/16	0	75	0	75
12'-5"	9	3/8	2 1/2	5 3/16	8	1/2	3 1/2	5 3/16	15	3/8	5 3/16	36	1/2	3 5/8	6	5 3/16	36	3/8	2 7/8	4 1/2	5 3/16	28 1/2	1/2	2 1/2	4	5 3/16	36	7/16 x 5/8	36	26	3/16	341	125	331	125
12'-5"	9	1/2	2 1/4	5 3/4	9	1/2	3 1/2	5 3/4	36	1/2	5 3/4	36	1/2	3 5/8	6	5 3/4	36	1/2	2 3/4	4 1/2	5 3/4	36	1/2	2 1/2	4	5 3/4	36	9/16 x 3/4	36	36	1/4	343	125	331	125
13'-5"	8	3/8	2 1/2	5 3/16	12	3/4	5 1/4	5 3/16	14	3/8	5 3/16	36	1/2	3 5/8	6	5 3/16	36	3/8	2 7/8	4 1/2	5 3/16	22 3/4	1/2	3 3/4	6	5 3/16	36	7/16 x 5/8	36	23	3/16	385	135	377	135
13'-5"	8	1/2	2 1/4	5 3/4	8	1/2	3 1/2	5 3/4	33	1/2	5 3/4	36	1/2	3 5/8	6	5 3/4	36	1/2	2 3/4	4 1/2	5 3/4	36	1/2	2 1/2	4	5 3/4	36	9/16 x 3/4	36	35	1/4	386	135	377	135
14'-5"	8	1/2	3 1/2	5 3/16	10	3/4	5 1/4	5 3/16	11	3/8	5 3/16	19	1/2	3 5/8	6	5 3/16	36	1/2	3 7/8	6	5 3/16	28 1/2	1/2	3 3/4	8	5 3/16	30	7/16 x 5/8	30	20	3/16	454	145	447	145
14'-5"	10	1/2	3 1/2	5 3/4	12	3/4	5 1/4	5 3/4	28	1/2	5 3/4	36	1/2	3 5/8	6	5 3/4	36	1/2	2 3/4	4 1/2	5 3/4	28 1/2	1/2	3 3/4	6	5 3/4	36	9/16 x 3/4	36	30	1/4	455	145	447	145
15'-5"	11	3/4	4 3/8	5 3/16	8	3/4	5 1/4	5 3/16	10	3/8	5 3/16	22 3/4	1/2	3 5/8	8	5 3/16	36	3/4	4 1/8	6 3/4	5 3/16	36	3/4	4 3/8	7	5 3/16	25	7/16 x 5/8	25	16	3/16	548	155	541	155
15'-5"	8	1/2	3 1/2	5 3/4	10	3/4	5 1/4	5 3/4	23	1/2	5 3/4	19	1/2	3 5/8	6	5 3/4	36	1/2	3 7/8	6	5 3/4	28 1/2	1/2	3 3/4	8	5 3/4	36	9/16 x 3/4	36	25	1/4	549	155	541	155
16'-5"	10	3/4	4 3/8	5 7/16	8	3/4	5 1/4	5 7/16	9	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	28 1/2	3/4	4 1/8	6 3/4	5 7/16	28 1/2	3/4	4 3/8	7	5 7/16	21	7/16 x 5/8	21	14	3/16	640	165	633	165
16'-5"	8	3/4	3 1/4	5 3/4	9	3/4	5 1/4	5 3/4	20	1/2	5 3/4	28 1/2	1/2	3 5/8	8	5 3/4	19	1/2	3 7/8	6	5 3/4	36	3/4	4 3/8	7	5 3/4	36	9/16 x 3/4	36	21	1/4	641	165	633	165
17'-5"	9	3/4	4 3/8	5 7/16	N/A				8	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	28 1/2	3/4	4 3/8	8	5 7/16	19	7/16 x 5/8	19	12	3/16	730	175	724	176
17'-5"	10	3/4	4 3/8	5 3/4	8	3/4	5 1/4	5 3/4	17	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	22 3/4	3/4	4 1/8	6 3/4	5 3/4	22 3/4	3/4	4 3/8	7	5 3/4	34	9/16 x 3/4	34	19	1/4	731	175	724	176
18'-5"	8	3/4	4 3/8	5 7/16	N/A				7	3/8	5 7/16	28 1/2	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	N/A	3/4	4 3/8	8	5 7/16	17	7/16 x 5/8	17	11	3/16	820	185	813	186
18'-5"	9	3/4	4 3/8	5 3/4	N/A				16	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	28 1/2	3/4	4 3/8	8	5 3/4	30	9/16 x 3/4	30	17	1/4	821	186	813	186
19'-5"	N/A				N/A				6	3/8	5 7/16	N/A				N/A				N/A				14	7/16 x 5/8	14	9	3/16	958	196	952	196			
19'-5"	N/A				N/A				13	1/2	5 3/4	22 3/4	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	N/A				26	9/16 x 3/4	26	14	1/4	959	196	952	196	
20'-5"	N/A				N/A				5	3/8	5 7/16	N/A				N/A				N/A				13	7/16 x 5/8	13	8	3/16	1052	206	1045	207			
20'-5"	N/A				N/A				12	1/2	5 3/4	N/A				N/A				N/A				23	9/16 x 3/4	23	13	1/4	1053	206	1045	207			
21'-5"	N/A				N/A				5	3/8	5 7/16	N/A				N/A				N/A				12	7/16 x 5/8	12	7	3/16	1146	216	1140	217			
21'-5"	N/A				N/A				11	1/2	5 3/4	N/A				N/A				N/A				22	9/16 x 3/4	22	12	1/4	1147	217	1140	217			
22'-5"	N/A				N/A				17	5/8	6 1/4	22 3/4	3/4	5 9/16	8	6 1/4	19	5/8	5 1/8	7 7/8	6 1/4	28 1/2	5/8	4 3/4	6 1/4	6 1/4	36	11/16 x 7/8	36	24	5/16	912	225	907	225
23'-5"	N/A				N/A				16	5/8	6 1/4	N/A				N/A				N/A				36	11/16 x 7/8	36	22	5/16	986	235	981	235			
24'-5"	N/A				N/A				15	5/8	6 1/4	N/A				N/A				N/A				36	11/16 x 7/8	36	21	5/16	1060	245	1055	246			
25'-5"	N/A				N/A				16	5/8	7 5/16	22 3/4	3/4	5 9/16	8	7 5/16	36	3/4	5 3/4	8 3/4	7 5/16	N/A				36	11/16 x 7/8	36	24	5/16	1136	255	1130	256	
26'-5"	N/A				N/A				15	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	22	5/16	1212	265	1206	266			
27'-5"	N/A				N/A				14	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	21	5/16	1288	275	1283	276			
28'-5"	N/A				N/A				13	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	20	5/16	1366	286	1360	286			
29'-5"	N/A				N/A				13	5/8	6 13/16	N/A				N/A				N/A				34	11/16 x 7/8	34	18	5/16	1445	296	1439	297			
30'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				N/A				32	11/16 x 7/8	32	17	5/16	1524	306	1519	307			
31'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				30	11/16 x 7/8	30	17	5/16	1605	317	1599	317			
32'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				29	11/16 x 7/8	29	16	5/16	1686	327	1680	328			
33'-5"	N/A				N/A				10	5/8	6 13/16	N/A				N/A				N/A				27	11/16 x 7/8	27	15	5/16	1769	337	1763	338			
34'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				25	11/16 x 7/8	25	14	5/16	1852	348	1846	348			
35'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				24	11/16 x 7/8	24	13	5/16	1937	358	1931	359			
36'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				23	11/16 x 7/8	23	12	5/16	2022	368	2016	369			
37'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				22	11/16 x 7/8	22	12	5/16	2109	379	2102	380			
38'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				21	11/16 x 7/8	21	11	5/16	2196	389	2190	390			
39'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				20	11/16 x 7/8	20	11	5/16	2285	400	2278	401			
40'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				19	11/16 x 7/8	19	10	5/16	2374	410	2368	411			



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:			
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG			
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED			DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: <b>AS NOTED</b>	SHEET: <b>12/53</b>
DWG NO: <b>ES-16-62-CIW</b>						

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 30 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
6'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	36	2 5/8	3 15/16	4 9/16	36	3	4 1/2	4 9/16	30	2	3	4 9/16
6'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	21	2 5/8	3 15/16	5 3/4	22	3	4 1/2	5 3/4	17	2	3	5 3/4
12'-5"	1 5/16	0.532	CP1151	334	12	3/8	16	N/A				9	2 5/8	3 15/16	5 7/16	9	3	4 1/2	5 7/16	5	2	3	5 7/16
12'-5"	1 5/16	0.532	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	20	4 1/2	6 3/4	5 3/4	16	4 1/8	6 3/16	5 3/4	9	2 1/2	3 3/4	5 3/4
13'-5"	1 7/16	0.657	CP1151	334	12	3/8	14	N/A				8	2 5/8	3 15/16	5 7/16	8	3	4 1/2	5 7/16	5	2	3	5 7/16
13'-5"	1 7/16	0.657	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	18	4 1/2	6 3/4	5 3/4	15	4 1/8	6 3/16	5 3/4	8	2 1/2	3 3/4	5 3/4
14'-5"	1 1/2	0.719	CP1151	334	11	3/8	13	N/A				7	2 5/8	3 15/16	5 7/16	7	3	4 1/2	5 7/16	4	2	3	5 7/16
14'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	16	4 1/2	6 3/4	5 3/4	13	4 1/8	6 3/16	5 3/4	7	2 1/2	3 3/4	5 3/4
15'-5"	1 1/2	0.656	CP1152	334	10	3/8	11	N/A				6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	4	2 1/2	3 3/4	5 7/16
15'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	28	3 5/8	6	5 3/4	13	4 1/2	6 3/4	5 3/4	11	4 1/8	6 3/16	5 3/4	6	2 1/2	3 3/4	5 3/4
16'-5"	1 1/2	0.656	CP1152	334	9	3/8	10	N/A				5	2 5/8	3 15/16	5 7/16	N/A				6	3 1/2	5 1/4	5 7/16
16'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	28	3 5/8	8	5 3/4	12	4 1/2	6 3/4	5 3/4	9	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
17'-5"	2	1.219	CP1151	444	11	5/8	18	36	4 3/8	6	6 1/4	18	4 1/2	6 3/4	6 1/4	15	5 1/8	7 11/16	6 1/4	7	3	4 1/2	6 1/4
18'-5"	2	1.156	CP1152	444	10	5/8	18	28	4 3/8	6	6 1/4	16	4 1/2	6 3/4	6 1/4	14	5 1/8	7 11/16	6 1/4	10	4	6	6 1/4
19'-5"	2	1.156	CP1152	444	9	5/8	18	36	4 3/8	8	6 1/4	14	4 1/2	6 3/4	6 1/4	12	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
20'-5"	2	1.156	CP1152	445	9	5/8	18	28	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	14	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
21'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
22'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
23'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	22	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	N/A				8	4	6	6 13/16
24'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				10	5	7 1/2	6 13/16
25'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A				10	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
26'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
27'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
28'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
29'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
30'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
31'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
32'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
33'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
34'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				10	5	7 1/2	7 1/2	11	6 5/8	9 15/16	7 1/2	N/A			
35'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
36'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
37'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
38'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
39'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
40'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				7	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			



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 NON-IMPACT RATED	DRAWN BY:	TJE	SIZE:	B	SCALE:	AS NOTED	SHEET:	13/53
DWG NO:	ES-16-62-CIW								

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 30 PSF, Cont.																																					
DBG Up To	Filled CMU									Cracked Concrete Minimum 3,000 PSI Compressive Strength															Steel (Wall anchors are the same diameter as assembly fasteners)			Superimposed Loads									
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Hilti Kwik Bolt TZ					Simpson Strong-Bolt 2					ITW Redhead Trubolt+					Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)		
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Distance	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness						
6'-5"	8	3/8	1 5/8	4 9/16	15	3/8	2 5/8	4 9/16	36	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	36	3/8	1 7/8	3 1/4	4 9/16	36	3/8	2	4	4 9/16	36	7/16 x 5/8	36	36	3/16	0	98	0	97		
6'-5"	12	3/8	2 1/2	5 3/4	8	3/8	2 5/8	5 3/4	21	3/8	5 3/4	19	3/8	2 5/16	4	5 3/4	36	3/8	2 7/8	4 1/2	5 3/4	36	3/8	2	5	5 3/4	36	7/16 x 5/8	36	36	3/16	0	98	0	97		
12'-5"	10	3/4	4 3/8	5 7/16	8	3/4	5 1/4	5 7/16	9	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	22 3/4	3/4	4 1/8	6 3/4	5 7/16	28 1/2	3/4	4 3/8	7	5 7/16	21	7/16 x 5/8	21	14	3/16	648	188	635	188		
12'-5"	8	3/4	3 1/4	5 3/4	9	3/4	5 1/4	5 3/4	20	1/2	5 3/4	28 1/2	1/2	3 5/8	8	5 3/4	36	3/4	4 1/8	6 3/4	5 3/4	36	3/4	4 3/8	7	5 3/4	36	9/16 x 3/4	36	21	1/4	650	188	635	188		
13'-5"	9	3/4	4 3/8	5 7/16	N/A				8	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	16 1/4	3/4	4 3/8	7	5 7/16	20	7/16 x 5/8	20	13	3/16	693	202	683	203		
13'-5"	10	3/4	4 3/8	5 3/4	8	3/4	5 1/4	5 3/4	18	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	28 1/2	3/4	4 1/8	6 3/4	5 3/4	28 1/2	3/4	4 3/8	7	5 3/4	35	9/16 x 3/4	35	19	1/4	695	203	683	203		
14'-5"	8	3/4	4 3/8	5 7/16	N/A				7	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	19	3/4	4 3/8	8	5 7/16	17	7/16 x 5/8	17	11	3/16	781	217	772	218		
14'-5"	9	3/4	4 3/8	5 3/4	N/A				16	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	36	3/4	4 3/8	8	5 3/4	31	9/16 x 3/4	31	17	1/4	783	218	772	218		
15'-5"	N/A				N/A				6	3/8	5 7/16	N/A				N/A				N/A				14	7/16 x 5/8	14	9	3/16	962	233	953	234					
15'-5"	N/A				N/A				13	1/2	5 3/4	22 3/4	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	N/A				26	9/16 x 3/4	26	14	1/4	963	233	953	234			
16'-5"	N/A				N/A				5	3/8	5 7/16	N/A				N/A				N/A				12	7/16 x 5/8	12	8	3/16	1094	248	1085	249					
16'-5"	N/A				N/A				12	1/2	5 3/4	N/A				N/A				N/A				22	9/16 x 3/4	22	12	1/4	1096	249	1085	249					
17'-5"	8	3/4	4 3/8	6 1/4	N/A				18	5/8	6 1/4	28 1/2	3/4	5 9/16	8	6 1/4	22 3/4	5/8	5 1/8	7 7/8	6 1/4	28 1/2	5/8	4 3/4	6 1/4	6 1/4	36	11/16 x 7/8	36	26	5/16	859	261	851	262		
18'-5"	N/A				N/A				16	5/8	6 1/4	N/A				N/A				N/A				36	11/16 x 7/8	36	22	5/16	990	276	983	277					
19'-5"	N/A				N/A				14	5/8	6 1/4	N/A				N/A				N/A				36	11/16 x 7/8	36	20	5/16	1094	292	1086	293					
20'-5"	N/A				N/A				15	5/8	6 13/16	N/A				N/A				36	3/4	5 3/4	8 3/4	6 13/16	N/A				36	11/16 x 7/8	36	22	5/16	1198	307	1190	308
21'-5"	N/A				N/A				14	5/8	6 13/16	N/A				N/A				N/A				N/A				36	11/16 x 7/8	36	20	5/16	1303	322	1296	323	
22'-5"	N/A				N/A				13	5/8	6 13/16	N/A				N/A				N/A				N/A				35	11/16 x 7/8	35	19	5/16	1409	337	1402	338	
23'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				N/A				N/A				32	11/16 x 7/8	32	18	5/16	1517	353	1509	354	
24'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				N/A				30	11/16 x 7/8	30	16	5/16	1625	368	1617	369	
25'-5"	N/A				N/A				10	5/8	6 13/16	N/A				N/A				N/A				N/A				28	11/16 x 7/8	28	15	5/16	1735	383	1727	384	
26'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				N/A				25	11/16 x 7/8	25	14	5/16	1847	399	1839	400	
27'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				N/A				23	11/16 x 7/8	23	13	5/16	1960	414	1952	415	
28'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				N/A				22	11/16 x 7/8	22	12	5/16	2075	430	2066	431	
29'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				N/A				21	11/16 x 7/8	21	11	5/16	2191	445	2182	446	
30'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				N/A				20	11/16 x 7/8	20	11	5/16	2308	461	2300	462	
31'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				N/A				N/A				19	11/16 x 7/8	19	10	5/16	2428	477	2419	478	
32'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				N/A				N/A				18	11/16 x 7/8	18	10	5/16	2549	492	2540	493	
33'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				N/A				N/A				17	11/16 x 7/8	17	9	5/16	2671	508	2662	509	
34'-5"	N/A				N/A				10	3/4	7 1/2	N/A				N/A				N/A				N/A				36	13/16 x 1	36	20	3/8	2323	520	2315	520	
35'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				N/A				N/A				36	13/16 x 1	36	19	3/8	2428	535	2421	536	
36'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				N/A				N/A				35	13/16 x 1	35	19	3/8	2535	551	2527	551	
37'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				N/A				33	13/16 x 1	33	18	3/8	2643	566	2635	567	
38'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				N/A				32	13/16 x 1	32	17	3/8	2752	582	2744	583	
39'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				N/A				31	13/16 x 1	31	16	3/8	2862	598	2854	598	
40'-5"	N/A				N/A				7	3/4	7 1/2	N/A				N/A				N/A				N/A				29	13/16 x 1	29	16	3/8	2974	614	2966	614	



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 NON-IMPACT RATED

DRAWN BY: TJE  
SIZE: B  
SCALE: AS NOTED  
SHEET: 14/53  
DWG NO: ES-16-62-CIW

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 40 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	33	2 5/8	3 15/16	4 9/16	34	3	4 1/2	4 9/16	36	2 1/2	3 3/4	4 9/16
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	19	2 5/8	3 15/16	5 3/4	19	3	4 1/2	5 3/4	15	2	3	5 3/4
12'-5"	1 3/8	0.531	CP1152	334	10	3/8	11	N/A				6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	4	2 1/2	3 3/4	5 7/16
12'-5"	1 3/8	0.531	CP1152	344	10	1/2	18	28	3 5/8	6	5 3/4	13	4 1/2	6 3/4	5 3/4	11	4 1/8	6 3/16	5 3/4	6	2 1/2	3 3/4	5 3/4
13'-5"	1 1/2	0.656	CP1152	334	10	3/8	10	N/A				6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	4	2 1/2	3 3/4	5 7/16
13'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	19	3 5/8	6	5 3/4	12	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
14'-5"	1 5/8	0.781	CP1152	444	10	5/8	18	22	4 3/8	6	6 1/4	15	4 1/2	6 3/4	6 1/4	13	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
15'-5"	1 7/8	1.031	CP1152	444	10	5/8	18	22	4 3/8	6	6 1/4	15	4 1/2	6 3/4	6 1/4	13	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
16'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	6	6 13/16	16	4 1/2	6 3/4	6 13/16	15	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
17'-5"	2	1.156	CP1152	445	9	5/8	18	22	4 3/8	6	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
18'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
19'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	22	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
20'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
22'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
23'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
24'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
25'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
26'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
27'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	11	6 5/8	9 15/16	7 1/2	N/A			
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
30'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
31'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
32'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			



	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		DRAWN BY: TJE	SIZE: B	SCALE: AS NOTED	SHEET: 15/53
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED			DWG NO: ES-16-62-CIW			

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	09/30/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 40 PSF, Cont.																				
DBG Up To	Filled CMU								Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads					
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness				
5'-5"	19	3/8	2 1/2	4 9/16	13	3/8	2 5/8	4 9/16	33	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	110	0	109
5'-5"	10	3/8	2 1/2	5 3/4	9	1/2	3 1/2	5 3/4	19	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	110	0	109
12'-5"	N/A				N/A				6	3/8	5 7/16	14	7/16 x 5/8	14	9	3/16	955	251	940	251
12'-5"	N/A				N/A				13	1/2	5 3/4	26	9/16 x 3/4	26	14	1/4	957	251	940	251
13'-5"	N/A				N/A				6	3/8	5 7/16	13	7/16 x 5/8	13	9	3/16	1002	270	990	271
13'-5"	N/A				N/A				12	1/2	5 3/4	24	9/16 x 3/4	24	13	1/4	1004	271	990	271
14'-5"	N/A				N/A				15	5/8	6 1/4	36	11/16 x 7/8	36	22	5/16	1062	290	1048	291
15'-5"	N/A				N/A				15	5/8	6 1/4	36	11/16 x 7/8	36	22	5/16	1033	309	1022	310
16'-5"	N/A				N/A				16	5/8	6 13/16	36	11/16 x 7/8	36	24	5/16	1096	328	1086	329
17'-5"	N/A				N/A				14	5/8	6 13/16	36	11/16 x 7/8	36	22	5/16	1228	349	1218	350
18'-5"	N/A				N/A				13	5/8	6 13/16	36	11/16 x 7/8	36	20	5/16	1361	369	1351	370
18'-5"	N/A				N/A				12	5/8	6 13/16	33	11/16 x 7/8	33	18	5/16	1495	389	1485	390
19'-5"	N/A				N/A				12	5/8	6 13/16	30	11/16 x 7/8	30	16	5/16	1631	409	1621	411
20'-5"	N/A				N/A				11	5/8	6 13/16	30	11/16 x 7/8	30	16	5/16	1631	409	1621	411
21'-5"	N/A				N/A				10	5/8	6 7/8	26	11/16 x 7/8	26	14	5/16	1768	430	1758	431
22'-5"	N/A				N/A				9	5/8	6 7/8	24	11/16 x 7/8	24	13	5/16	1907	450	1896	452
23'-5"	N/A				N/A				9	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2047	471	2037	472
24'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	11	5/16	2190	492	2180	493
25'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2335	512	2325	514
26'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2482	533	2471	534
27'-5"	N/A				N/A				7	5/8	6 7/8	17	11/16 x 7/8	17	9	5/16	2631	554	2621	555
28'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	20	3/8	2309	571	2299	571
29'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	19	3/8	2438	591	2428	592
30'-5"	N/A				N/A				9	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2568	612	2558	613
31'-5"	N/A				N/A				8	3/4	7 1/2	32	13/16 x 1	32	17	3/8	2701	633	2691	633
32'-5"	N/A				N/A				8	3/4	7 1/2	31	13/16 x 1	31	17	3/8	2835	653	2825	654



24 ELMWOOD AVE 1901 S. LITCHFIELD RD  
MOUNTAINTOP, PA GOODYEAR, AZ  
P: 800.233.8366  
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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 NON-IMPACT RATED	DRAWN BY:	TJE	SIZE:	B	SCALE:	AS NOTED	SHEET:	16/53
DWG NO:	ES-16-62-CIW								

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 50 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	32	2 5/8	3 15/16	4 9/16	33	3	4 1/2	4 9/16	35	2 1/2	3	4 9/16
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	18	2 5/8	3 15/16	5 3/4	19	3	4 1/2	5 3/4	14	2	6	5 3/4
12'-5"	1 3/8	0.531	CP1152	445	9	5/8	18	22	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
13'-5"	1 1/2	0.656	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
14'-5"	1 5/8	0.781	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
15'-5"	1 7/8	1.031	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
16'-5"	2	1.156	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
17'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				7	4	7 1/2	6 13/16
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
19'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
20'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
21'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
22'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
23'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	11	6 5/8	9 15/16	7 1/2	N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
26'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
27'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				7	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			



	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 NON-IMPACT RATED

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 50 PSF, Cont.																				
DBG Up To	Filled CMU								Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads					
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness				
4'-5"	18	3/8	2 1/2	4 9/16	13	3/8	2 5/8	4 9/16	32	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	112	0	111
4'-5"	10	3/8	2 1/2	5 3/4	9	1/2	3 1/2	5 3/4	18	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	113	0	111
12'-5"	N/A				N/A				15	5/8	6 13/16	36	11/16 x 7/8	36	21	5/16	1272	313	1249	314
13'-5"	N/A				N/A				14	5/8	6 13/16	36	11/16 x 7/8	36	20	5/16	1320	338	1301	339
14'-5"	N/A				N/A				13	5/8	6 13/16	35	11/16 x 7/8	35	19	5/16	1378	362	1361	364
15'-5"	N/A				N/A				13	5/8	6 13/16	36	11/16 x 7/8	36	20	5/16	1335	386	1322	387
16'-5"	N/A				N/A				12	5/8	6 13/16	35	11/16 x 7/8	35	19	5/16	1408	411	1396	412
17'-5"	N/A				N/A				11	5/8	6 13/16	31	11/16 x 7/8	31	17	5/16	1569	436	1558	438
18'-5"	N/A				N/A				10	5/8	6 7/8	27	11/16 x 7/8	27	15	5/16	1732	461	1720	463
19'-5"	N/A				N/A				9	5/8	6 7/8	24	11/16 x 7/8	24	13	5/16	1897	487	1884	489
20'-5"	N/A				N/A				9	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2063	512	2051	514
21'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	11	5/16	2232	538	2220	540
22'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2404	564	2391	566
23'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2578	590	2565	592
24'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	21	3/8	2281	612	2270	613
25'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	19	3/8	2432	637	2421	638
26'-5"	N/A				N/A				8	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2585	663	2574	664
27'-5"	N/A				N/A				8	3/4	7 1/2	32	13/16 x 1	32	17	3/8	2741	689	2729	690
28'-5"	N/A				N/A				7	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2898	715	2886	716



	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 NON-IMPACT RATED	DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: <b>AS NOTED</b>	SHEET: <b>18/53</b>
		DWG NO: <b>ES-16-62-CIW</b>		

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 60 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	27	2 5/8	3 15/16	4 9/16	28	3	4 1/2	4 9/16	29	2 1/2	3 3/4	4 9/16
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	15	2 5/8	3 15/16	5 3/4	16	3	4 1/2	5 3/4	12	2 1/2	3 3/4	5 3/4
12'-5"	1 3/8	0.531	CP1152 & CP1153	445	8	5/8	18	22	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
13'-5"	1 1/2	0.656	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				7	2 1/2	3 3/4	6 13/16
14'-5"	1 5/8	0.781	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				9	2 1/2	3 3/4	6 13/16
15'-5"	1 7/8	1.031	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				9	2 1/2	3 3/4	6 13/16
16'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	2 1/2	3 3/4	6 7/8
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	2 1/2	3 3/4	6 7/8
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	2 1/2	3 3/4	6 7/8
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	7	3/4	18	N/A				10	5	7 1/2	7 1/2	11	6 5/8	9 15/16	7 1/2	N/A			
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			

CP0020 - 0.0220 Minimum Thickness Galvanized or Stainless Steel - 60 PSF, Cont.																				
DBG Up To	Filled CMU									Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads				
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness				
4'-5"	15	3/8	2 1/2	4 9/16	10	3/8	2 5/8	4 9/16	27	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	135	0	133
4'-5"	8	3/8	2 1/2	5 3/4	14	3/4	2 5/8	5 3/4	15	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	135	0	133
12'-5"	N/A				N/A				12	5/8	6 13/16	31	11/16 x 7/8	31	17	5/16	1581	376	1555	378
13'-5"	N/A				N/A				11	5/8	6 13/16	30	11/16 x 7/8	30	16	5/16	1631	405	1609	407
14'-5"	N/A				N/A				11	5/8	6 13/16	29	11/16 x 7/8	29	16	5/16	1694	435	1674	437
15'-5"	N/A				N/A				11	5/8	6 13/16	30	11/16 x 7/8	30	16	5/16	1637	463	1622	465
16'-5"	N/A				N/A				10	5/8	6 7/8	27	11/16 x 7/8	27	15	5/16	1721	493	1707	495
17'-5"	N/A				N/A				9	5/8	6 7/8	24	11/16 x 7/8	24	13	5/16	1911	524	1897	525
18'-5"	N/A				N/A				8	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2103	554	2089	556
19'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2298	585	2283	587
20'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2496	616	2481	618
21'-5"	N/A				N/A				10	3/4	7 1/2	36	13/16 x 1	36	21	3/8	2228	643	2215	644
22'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	19	3/8	2400	674	2386	674
23'-5"	N/A				N/A				8	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2574	704	2561	705
24'-5"	N/A				N/A				8	3/4	7 1/2	32	13/16 x 1	32	17	3/8	2751	735	2738	736
25'-5"	N/A				N/A				7	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2931	766	2917	767



	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 NON-IMPACT RATED

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/15/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 20 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
8'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	36	2 5/8	3 15/16	4 9/16	36	3	4 1/2	4 9/16	34	2	3	4 9/16
8'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	24	2 5/8	3 15/16	5 3/4	25	3	4 1/2	5 3/4	19	2	3	5 3/4
14'-5"	1 3/8	0.594	CP1151	333	12	3/8	18	22	2 3/8	5	5 3/16	11	2 5/8	3 15/16	5 3/16	12	3	4 1/2	5 3/16	7	2	3	5 3/16
14'-5"	1 3/8	0.594	CP1151	344	12	1/2	18	22	2 1/4	4	5 3/4	27	4 1/2	6 3/4	5 3/4	22	4 1/8	6 3/16	5 3/4	12	2 1/2	3 3/4	5 3/4
15'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	12	2 3/8	5	5 3/16	10	2 5/8	3 15/16	5 3/16	11	3	4 1/2	5 3/16	6	2	3	5 3/16
15'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	11	2 1/4	4	5 3/4	25	4 1/2	6 3/4	5 3/4	20	4 1/8	6 3/16	5 3/4	11	2 1/2	3 3/4	5 3/4
16'-5"	1 1/2	0.719	CP1151	333	12	3/8	17					9	2 5/8	3 15/16	5 3/16	9	3	4 1/2	5 3/16	5	2	3	5 3/16
16'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	21	4 1/2	6 3/4	5 3/4	17	4 1/8	6 3/16	5 3/4	9	2 1/2	3 3/4	5 3/4
17'-5"	1 1/2	0.719	CP1151	334	12	3/8	15					8	2 5/8	3 15/16	5 7/16	8	3	4 1/2	5 7/16	5	2	3	5 7/16
17'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	18	4 1/2	6 3/4	5 3/4	15	4 1/8	6 3/16	5 3/4	8	2 1/2	3 3/4	5 3/4
18'-5"	1 1/2	0.719	CP1151	334	11	3/8	13					7	2 5/8	3 15/16	5 7/16	7	3	4 1/2	5 7/16	4	2	3	5 7/16
18'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	16	4 1/2	6 3/4	5 3/4	13	4 1/8	6 3/16	5 3/4	7	2 1/2	3 3/4	5 3/4
19'-5"	1 1/2	0.719	CP1151	334	11	3/8	12					7	2 5/8	3 15/16	5 7/16	7	3	4 1/2	5 7/16	5	2 1/2	3 3/4	5 7/16
19'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	15	4 1/2	6 3/4	5 3/4	12	4 1/8	6 3/16	5 3/4	6	2 1/2	3 3/4	5 3/4
20'-5"	1 1/2	0.656	CP1152	334	10	3/8	11					6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	4	2 1/2	3 3/4	5 7/16
20'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	19	3 5/8	6	5 3/4	13	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
21'-5"	1 1/2	0.656	CP1152	334	9	3/8	10					5	2 5/8	3 15/16	5 7/16					6	3 1/2	5 1/4	5 7/16
21'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	28	3 5/8	8	5 3/4	11	4 1/2	6 3/4	5 3/4	9	4 1/8	6 3/16	5 3/4	7	3 1/2	5 1/4	5 3/4
22'-5"	2	1.219	CP1151	444	11	5/8	18	36	4 3/8	6	6 1/4	18	4 1/2	6 3/4	6 1/4	16	5 1/8	7 11/16	6 1/4	7	3	4 1/2	6 1/4
23'-5"	2	1.156	CP1152	444	10	5/8	18	36	4 3/8	6	6 1/4	16	4 1/2	6 3/4	6 1/4	14	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
24'-5"	2	1.156	CP1152	444	10	5/8	18	28	4 3/8	6	6 1/4	15	4 1/2	6 3/4	6 1/4	13	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
25'-5"	2	1.156	CP1152	444	9	5/8	18	36	4 3/8	8	6 1/4	14	4 1/2	6 3/4	6 1/4	12	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
26'-5"	2	1.156	CP1152	445	9	5/8	18	28	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	14	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
27'-5"	2	1.156	CP1152	445	9	5/8	18	22	4 3/8	6	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
28'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
29'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
30'-5"	2	1.156	CP1152	445	8	5/8	18	22	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
31'-5"	2	1.156	CP1152	445	8	5/8	18					11	4 1/2	6 3/4	6 13/16					7	4	6	6 13/16
32'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18					11	4 1/2	6 3/4	6 13/16					9	5	7 1/2	6 13/16
33'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18					10	4 1/2	6 3/4	6 13/16					9	5	7 1/2	6 13/16
34'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18					10	4 1/2	6 3/4	6 7/8					9	5	7 1/2	6 7/8
35'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18					10	4 1/2	6 3/4	6 7/8					8	5	7 1/2	6 7/8
36'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18					9	4 1/2	6 3/4	6 7/8					8	5	7 1/2	6 7/8
37'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18					9	4 1/2	6 3/4	6 7/8					8	5	7 1/2	6 7/8
38'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17					8	4 1/2	6 3/4	6 7/8					7	5	7 1/2	6 7/8
39'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	17					8	4 1/2	6 3/4	6 7/8								
40'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16					8	4 1/2	6 3/4	6 7/8								



	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 NON-IMPACT RATED

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 20 PSF, Cont.																																										
DBG Up To	Filled CMU												Cracked Concrete Minimum 3,000 PSI Compressive Strength												Steel (Wall anchors are the same diameter as assembly fasteners)				Superimposed Loads													
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Hilti Kwik Bolt TZ				Simpson Strong-Bolt 2				ITW Redhead Trubolt+				Welded		Through Bolt		Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)								
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Dist	Max O.C.	Dia.	Embed	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.					Min. Thickness							
8'-5"	10	3/8	1 5/8	4 9/16	17	3/8	2 5/8	4 9/16	36	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	36	3/8	1 7/8	3 1/4	4 9/16	36	3/8	2	5	5 3/4	36	7/16 x 5/8	36	36	3/16	0	85	0	85							
8'-5"	14	3/8	2 1/2	5 3/4	9	3/8	2 5/8	5 3/4	24	3/8	5 3/4	36	3/8	2 5/16	4	5 3/4	28 1/2	3/8	1 7/8	3 1/4	5 3/4	36	3/8	2	5	5 3/4	36	7/16 x 5/8	36	36	3/16	0	85	0	85							
14'-5"	8	1/2	3 1/2	5 3/16	10	3/4	5 1/4	5 3/16	11	3/8	5 3/16	16 1/4	1/2	3 5/8	6	5 3/16	36	1/2	3 7/8	6	5 3/16	28 1/2	1/2	3 3/4	8	5 3/16	29	7/16 x 5/8	29	19	3/16	465	145	456	145							
14'-5"	10	1/2	3 1/2	5 3/4	12	3/4	5 1/4	5 3/4	27	1/2	5 3/4	36	1/2	3 5/8	6	5 3/4	36	1/2	2 3/4	4 1/2	5 3/4	22 3/4	1/2	3 3/4	6	5 3/4	36	9/16 x 3/4	36	29	1/4	466	145	456	145							
15'-5"	8	3/4	3 1/4	5 3/16	9	3/4	5 1/4	5 3/16	10	3/8	5 3/16	36	1/2	3 5/8	8	5 3/16	28 1/2	1/2	3 7/8	6	5 3/16	36	3/4	4 3/8	7	5 3/16	27	7/16 x 5/8	27	18	3/16	499	155	491	155							
15'-5"	9	1/2	3 1/2	5 3/4	11	3/4	5 1/4	5 3/4	25	1/2	5 3/4	28 1/2	1/2	3 5/8	6	5 3/4	22 3/4	1/2	2 3/4	4 1/2	5 3/4	36	1/2	3 3/4	8	5 3/4	36	9/16 x 3/4	36	27	1/4	500	155	491	155							
16'-5"	10	3/4	4 3/8	5 3/16	8	3/4	5 1/4	5 3/16	9	3/8	5 3/16	36	3/4	5 9/16	8	5 3/16	22 3/4	3/4	4 1/8	6 3/4	5 3/16	22 3/4	3/4	4 3/8	7	5 3/16	23	7/16 x 5/8	23	15	3/16	596	165	589	165							
16'-5"	8	1/2	3 1/2	5 3/4	9	3/4	5 1/4	5 3/4	21	1/2	5 3/4	36	1/2	3 5/8	8	5 3/4	28 1/2	1/2	3 7/8	6	5 3/4	19	1/2	3 3/4	8	5 3/4	36	9/16 x 3/4	36	23	1/4	597	165	589	165							
17'-5"	9	3/4	4 3/8	5 7/16	N/A				8	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	16 1/4	3/4	4 1/8	6 3/4	5 7/16	16 1/4	3/4	4 3/8	7	5 7/16	20	7/16 x 5/8	20	13	3/16	691	175	685	175							
17'-5"	10	3/4	4 3/8	5 3/4	8	3/4	5 1/4	5 3/4	18	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	28 1/2	3/4	4 1/8	6 3/4	5 3/4	28 1/2	3/4	4 3/8	7	5 3/4	36	9/16 x 3/4	36	20	1/4	692	175	685	175							
18'-5"	8	3/4	4 3/8	5 7/16	N/A				7	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	19	3/4	4 3/8	8	5 7/16	17	7/16 x 5/8	17	11	3/16	785	185	779	186							
18'-5"	9	3/4	4 3/8	5 3/4	N/A				16	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	36	3/4	4 3/8	8	5 3/4	31	9/16 x 3/4	31	17	1/4	786	185	779	186							
19'-5"	N/A				N/A				7	3/8	5 7/16	N/A				N/A				N/A				15	7/16 x 5/8	15	10	3/16	878	195	872	196										
19'-5"	8	3/4	4 3/8	5 3/4	N/A				15	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	19	3/4	4 3/8	8	5 3/4	28	9/16 x 3/4	28	15	1/4	879	196	872	196							
20'-5"	N/A				N/A				6	3/8	5 7/16	N/A				N/A				N/A				13	7/16 x 5/8	13	8	3/16	1024	206	1017	206										
20'-5"	N/A				N/A				13	1/2	5 3/4	N/A				N/A				N/A				24	9/16 x 3/4	24	13	1/4	1025	206	1017	206										
21'-5"	N/A				N/A				5	3/8	5 7/16	N/A				N/A				N/A				12	7/16 x 5/8	12	8	3/16	1120	216	1114	217										
21'-5"	N/A				N/A				11	1/2	5 3/4	N/A				N/A				N/A				22	9/16 x 3/4	22	12	1/4	1121	216	1114	217										
22'-5"	8	3/4	4 3/8	6 1/4	N/A				18	5/8	6 1/4	19	5/8	4 7/16	8	6 1/4	28 1/2	5/8	5 1/8	7 7/8	6 1/4	36	5/8	4 3/4	6 1/4	6 1/4	36	11/16 x 7/8	36	26	5/16	862	224	856	225							
23'-5"	N/A				N/A				16	5/8	6 1/4	N/A				N/A				N/A				36	3/4	5 3/4	8 3/4	6 1/4	19	5/8	4 3/4	6 1/4	6 1/4	36	11/16 x 7/8	36	23	5/16	965	235	959	235
24'-5"	N/A				N/A				15	5/8	6 1/4	N/A				N/A				N/A				N/A				36	11/16 x 7/8	36	21	5/16	1041	245	1035	245						
25'-5"	N/A				N/A				14	5/8	6 1/4	N/A				N/A				N/A				N/A				36	11/16 x 7/8	36	20	5/16	1117	255	1112	256						
26'-5"	N/A				N/A				15	5/8	6 13/16	N/A				N/A				N/A				36	3/4	5 3/4	8 3/4	6 13/16	N/A				36	11/16 x 7/8	36	22	5/16	1195	265	1189	266	
27'-5"	N/A				N/A				14	5/8	6 13/16	N/A				N/A				N/A				N/A				36	11/16 x 7/8	36	21	5/16	1273	275	1267	276						
28'-5"	N/A				N/A				14	5/8	6 13/16	N/A				N/A				N/A				N/A				36	11/16 x 7/8	36	20	5/16	1352	286	1346	286						
29'-5"	N/A				N/A				13	5/8	6 13/16	N/A				N/A				N/A				N/A				34	11/16 x 7/8	34	19	5/16	1431	296	1425	296						
30'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				N/A				N/A				32	11/16 x 7/8	32	18	5/16	1512	306	1506	307						
31'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				N/A				30	11/16 x 7/8	30	17	5/16	1593	316	1587	317						
32'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				N/A				29	11/16 x 7/8	29	16	5/16	1675	327	1669	327						
33'-5"	N/A				N/A				10	5/8	6 13/16	N/A				N/A				N/A				N/A				28	11/16 x 7/8	28	15	5/16	1758	337	1752	338						
34'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				N/A				25	11/16 x 7/8	25	14	5/16	1842	347	1836	348						
35'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				N/A				24	11/16 x 7/8	24	13	5/16	1927	358	1921	358						
36'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				N/A				23	11/16 x 7/8	23	12	5/16	2013	368	2007	369						
37'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				N/A				22	11/16 x 7/8	22	12	5/16	2100	378	2094	379						
38'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				N/A				21	11/16 x 7/8	21	11	5/16	2188	389	2182	390						
39'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				N/A				20	11/16 x 7/8	20	11	5/16	2277	399	2271	400						
40'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				N/A				19	11/16 x 7/8	19	10	5/16	2367	410	2361	411						



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:	
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG	
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED		DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: SHEET: <b>AS NOTED 21/53</b>
		DWG NO: <b>ES-16-62-CIW</b>		

LTR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 30 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
6'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	36	2 5/8	3 15/16	4 9/16	36	3	4 1/2	4 9/16	30	2	3	4 9/16
6'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	21	2 5/8	3 15/16	5 3/4	22	3	4 1/2	5 3/4	17	2	3	5 3/4
14'-5"	1 3/8	0.594	CP1151	334	11	3/8	12	N/A				7	2 5/8	3 15/16	5 7/16	7	3	4 1/2	5 7/16	4	2	3	5 7/16
14'-5"	1 3/8	0.594	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	15	4 1/2	6 3/4	5 3/4	12	4 1/8	6 3/16	5 3/4	7	2 1/2	3 3/4	5 3/4
15'-5"	1 1/2	0.719	CP1151	334	11	3/8	12	N/A				7	2 5/8	3 15/16	5 7/16	7	3	4 1/2	5 7/16	5	2 1/2	3 3/4	5 7/16
15'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	15	4 1/2	6 3/4	5 3/4	12	4 1/8	6 3/16	5 3/4	6	2 1/2	3 3/4	5 3/4
16'-5"	1 1/2	0.656	CP1152	334	10	3/8	10	N/A				5	2 5/8	3 15/16	5 7/16	N/A				7	3 1/2	5 1/4	5 7/16
16'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	36	3 5/8	8	5 3/4	12	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
17'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	19	3 5/8	8	5 3/4	11	4 1/2	6 3/4	5 3/4	9	4 1/8	6 3/16	5 3/4	7	3 1/2	5 1/4	5 3/4
18'-5"	2	1.156	CP1152	444	10	5/8	18	36	4 3/8	6	6 1/4	16	4 1/2	6 3/4	6 1/4	14	5 1/8	7 11/16	6 1/4	10	4	6	6 1/4
19'-5"	2	1.156	CP1152	444	10	5/8	18	19	4 3/8	6	6 1/4	14	4 1/2	6 3/4	6 1/4	13	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
20'-5"	2	1.156	CP1152	445	9	5/8	18	28	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	14	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
21'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
22'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
23'-5"	2	1.156	CP1152	445	8	5/8	18	22	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
24'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
25'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A				10	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
26'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
27'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
28'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
29'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
30'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
31'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
32'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
33'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
34'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	18	N/A				6	4 1/2	6 3/4	6 7/8	N/A				N/A			
35'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
36'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
37'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
38'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
39'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
40'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				7	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:		
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG		
<b>TITLE:</b> WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED		<b>DRAWN BY:</b> TJE	<b>SIZE:</b> B	<b>SCALE:</b> AS NOTED	<b>SHEET:</b> 22/53
		<b>DWG NO:</b> ES-16-62-CIW			

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 30 PSF, Cont.																																			
DBG Up To	Filled CMU												Cracked Concrete Minimum 3,000 PSI Compressive Strength												Steel (Wall anchors are the same diameter as assembly fasteners)				Superimposed Loads						
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Hilti Kwik Bolt TZ				Simpson Strong-Bolt 2				ITW Redhead Trubolt+				Welded		Through Bolt	Tapped							
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)
6'-5"	8	3/8	1 5/8	4 9/16	15	3/8	2 5/8	4 9/16	36	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	36	3/8	1 7/8	3 1/4	4 9/16	36	3/8	2	4	4 9/16	36	7/16 x 5/8	36	36	3/16	0	98	0	97
6'-5"	12	3/8	2 1/2	5 3/4	8	3/8	2 5/8	5 3/4	21	3/8	5 3/4	19	3/8	2 5/16	4	5 3/4	36	3/8	2 7/8	4 1/2	5 3/4	36	3/8	2	5	5 3/4	36	7/16 x 5/8	36	36	3/16	0	98	0	97
14'-5"	8	3/4	4 3/8	5 7/16	N/A				7	3/8	5 7/16	28 1/2	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	N/A				16	7/16 x 5/8	16	11	3/16	826	218	814	218	
14'-5"	9	3/4	4 3/8	5 3/4	N/A				15	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	28 1/2	3/4	4 3/8	8	5 3/4	30	9/16 x 3/4	30	16	1/4	828	218	814	218
15'-5"	N/A				N/A				7	3/8	5 7/16	N/A				N/A				16	7/16 x 5/8	16	10	3/16	860	232	851	233							
15'-5"	8	3/4	4 3/8	5 3/4	N/A				15	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	19	3/4	4 3/8	8	5 3/4	28	9/16 x 3/4	28	16	1/4	862	233	851	233
16'-5"	N/A				N/A				5	3/8	5 7/16	N/A				N/A				13	7/16 x 5/8	13	8	3/16	1051	248	1041	249							
16'-5"	N/A				N/A				12	1/2	5 3/4	N/A				N/A				23	9/16 x 3/4	23	13	1/4	1052	248	1041	249							
17'-5"	N/A				N/A				11	1/2	5 3/4	N/A				N/A				21	9/16 x 3/4	21	11	1/4	1189	264	1178	264							
18'-5"	N/A				N/A				16	5/8	6 1/4	N/A				36	3/4	5 3/4	8 3/4	6 1/4	19	5/8	4 3/4	6 1/4	6 1/4	36	11/16 x 7/8	36	23	5/16	956	276	948	277	
19'-5"	N/A				N/A				14	5/8	6 1/4	N/A				N/A				36	11/16 x 7/8	36	21	5/16	1063	292	1055	292							
20'-5"	N/A				N/A				15	5/8	6 13/16	N/A				36	3/4	5 3/4	8 3/4	6 13/16	N/A				36	11/16 x 7/8	36	23	5/16	1170	307	1162	308		
21'-5"	N/A				N/A				14	5/8	6 13/16	N/A				N/A				36	11/16 x 7/8	36	21	5/16	1278	322	1270	323							
22'-5"	N/A				N/A				13	5/8	6 13/16	N/A				N/A				35	11/16 x 7/8	35	19	5/16	1386	337	1378	338							
23'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				33	11/16 x 7/8	33	18	5/16	1495	352	1487	353							
24'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				30	11/16 x 7/8	30	17	5/16	1606	368	1598	369							
25'-5"	N/A				N/A				10	5/8	6 13/16	N/A				N/A				28	11/16 x 7/8	28	15	5/16	1717	383	1709	384							
26'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				25	11/16 x 7/8	25	14	5/16	1830	399	1822	400							
27'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				24	11/16 x 7/8	24	13	5/16	1944	414	1936	415							
28'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				22	11/16 x 7/8	22	12	5/16	2060	429	2052	431							
29'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				21	11/16 x 7/8	21	11	5/16	2177	445	2169	446							
30'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				20	11/16 x 7/8	20	11	5/16	2296	461	2287	462							
31'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				19	11/16 x 7/8	19	10	5/16	2416	476	2407	477							
32'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				18	11/16 x 7/8	18	10	5/16	2538	492	2529	493							
33'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				17	11/16 x 7/8	17	9	5/16	2661	508	2652	509							
34'-5"	N/A				N/A				6	3/4	6 7/8	N/A				N/A				36	11/16 x 7/8	36	20	3/8	2313	519	2306	520							
35'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				36	13/16 x 1	36	20	3/8	2419	535	2411	535							
36'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				35	13/16 x 1	35	19	3/8	2526	550	2518	551							
37'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				33	13/16 x 1	33	18	3/8	2635	566	2626	566							
38'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				32	13/16 x 1	32	17	3/8	2744	582	2736	582							
39'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				31	13/16 x 1	31	17	3/8	2855	597	2847	598							
40'-5"	N/A				N/A				7	3/4	7 1/2	N/A				N/A				30	13/16 x 1	30	16	3/8	2967	613	2959	613							



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:		
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG		
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED		DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: <b>AS NOTED</b>	SHEET: <b>23/53</b>
		DWG NO: <b>ES-16-62-CIW</b>			

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 40 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	33	2 5/8	3 15/16	4 9/16	34	3	4 1/2	4 9/16	26	2	3	4 9/16
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	19	2 5/8	3 15/16	5 3/4	19	3	4 1/2	5 3/4	15	2	3	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 1/2	0.656	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
16'-5"	1 5/8	0.781	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
17'-5"	1 7/8	1.031	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
18'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
19'-5"	2	1.156	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
20'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
22'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
23'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
24'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
25'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
26'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
27'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
28'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	18	N/A				6	4 1/2	6 3/4	6 7/8	N/A				N/A			
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
30'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
31'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
32'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
33'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			
34'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	17	N/A				7	5	7 1/2	7 1/2	N/A				N/A			



	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 NON-IMPACT RATED
	SIZE: B SCALE: AS NOTED SHEET: 24/53	

LTR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 40 PSF, Cont.																					
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)					Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness					
5'-5"	19	3/8	2 1/2	4 9/16	13	3/8	2 5/8	4 9/16	33	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	110	0	109	
5'-5"	10	3/8	2 1/2	5 3/4	9	1/2	3 1/2	5 3/4	19	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	110	0	109	
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1117	290	1103	291	
15'-5"	N/A				N/A				14	5/8	6 13/16	36	11/16 x 7/8	36	21	5/16	1300	310	1284	312	
16'-5"	N/A				N/A				14	5/8	6 13/16	36	11/16 x 7/8	36	20	5/16	1333	330	1318	331	
17'-5"	N/A				N/A				14	5/8	6 13/16	36	11/16 x 7/8	36	21	5/16	1273	349	1262	350	
18'-5"	N/A				N/A				13	5/8	6 13/16	36	11/16 x 7/8	36	20	5/16	1327	369	1317	370	
19'-5"	N/A				N/A				12	5/8	6 13/16	33	11/16 x 7/8	33	18	5/16	1464	389	1454	390	
20'-5"	N/A				N/A				11	5/8	6 13/16	30	11/16 x 7/8	30	17	5/16	1603	409	1592	411	
21'-5"	N/A				N/A				10	5/8	6 7/8	26	11/16 x 7/8	26	14	5/16	1742	430	1732	431	
22'-5"	N/A				N/A				10	5/8	6 7/8	24	11/16 x 7/8	24	13	5/16	1883	450	1873	452	
23'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	12	5/16	2026	471	2016	472	
24'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	11	5/16	2171	491	2160	493	
25'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2317	512	2306	513	
26'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2465	533	2455	534	
27'-5"	N/A				N/A				7	5/8	6 7/8	17	11/16 x 7/8	17	9	5/16	2616	553	2605	555	
28'-5"	N/A				N/A				6	3/4	6 7/8	36	11/16 x 7/8	36	21	3/8	2294	570	2285	571	
29'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	19	3/8	2424	591	2414	592	
30'-5"	N/A				N/A				9	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2556	612	2546	612	
31'-5"	N/A				N/A				8	3/4	7 1/2	33	13/16 x 1	33	18	3/8	2689	632	2679	633	
32'-5"	N/A				N/A				8	3/4	7 1/2	31	13/16 x 1	31	17	3/8	2824	653	2814	654	
33'-5"	N/A				N/A				7	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2960	674	2950	674	
34'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3099	694	3089	695	



	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 NON-IMPACT RATED

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 50 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	26	2 5/8	3 15/16	4 9/16	27	3	4 1/2	4 9/16	21	2	3	4 9/16
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	15	2 5/8	3 15/16	5 3/4	15	3	4 1/2	5 3/4	30	3 1/2	0	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 1/2	0.656	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				N/A			
16'-5"	1 5/8	0.781	CP1152 & CP1153	445	7	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				N/A			
17'-5"	1 7/8	1.031	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				N/A			
18'-5"	2	1.156	CP1152 & CP1153	546	8	5/8	18	N/A				11	4 1/2	6 3/4	6 7/8	N/A				N/A			
19'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				N/A			
20'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				9	4 1/2	6 3/4	6 7/8	N/A				N/A			
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
22'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
23'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
24'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	18	N/A				6	4 1/2	6 3/4	6 7/8	N/A				N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
26'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
27'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				7	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	17	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 50 PSF, Cont.																						
DBG Up To	Filled CMU								Steel (Wall anchors are the same diameter as assembly fasteners)							Superimposed Loads						
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped		Superimposed Loads					
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)		
5'-5"	15	3/8	2 1/2	4 9/16	10	3/8	2 5/8	4 9/16	26	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	137	0	136		
5'-5"	8	3/8	2 1/2	5 3/4	14	3/4	5 1/4	5 3/4	15	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	138	0	136		
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1461	363	1443	364		
15'-5"	N/A				N/A				11	5/8	6 13/16	29	11/16 x 7/8	29	16	5/16	1682	389	1662	390		
16'-5"	N/A				N/A				11	5/8	6 13/16	28	11/16 x 7/8	28	15	5/16	1716	413	1698	415		
17'-5"	N/A				N/A				11	5/8	6 13/16	30	11/16 x 7/8	30	16	5/16	1635	437	1621	438		
18'-5"	N/A				N/A				11	5/8	6 7/8	27	11/16 x 7/8	27	15	5/16	1698	461	1685	463		
19'-5"	N/A				N/A				10	5/8	6 7/8	25	11/16 x 7/8	25	13	5/16	1865	487	1853	488		
20'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	12	5/16	2035	512	2023	514		
21'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	11	5/16	2207	538	2194	540		
22'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2380	564	2368	565		
23'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2557	589	2544	591		
24'-5"	N/A				N/A				6	3/4	6 7/8	36	11/16 x 7/8	36	21	3/8	2262	612	2250	612		
25'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	19	3/8	2414	637	2402	638		
26'-5"	N/A				N/A				8	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2569	663	2557	664		
27'-5"	N/A				N/A				8	3/4	7 1/2	32	13/16 x 1	32	17	3/8	2725	688	2713	689		
28'-5"	N/A				N/A				7	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2884	714	2872	715		
29'-5"	N/A				N/A				7	3/4	7 1/2	29	13/16 x 1	29	15	3/8	3045	740	3033	741		



	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 NON-IMPACT RATED
	SIZE: B SCALE: AS NOTED SHEET: 26/53	

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 60 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	27	2 5/8	3 15/16	4 9/16	28	3	4 1/2	4 9/16	21	2	3	4 9/16
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	15	2 5/8	3 15/16	5 3/4	16	3	4 1/2	5 3/4	31	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 1/2	0.656	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	2 1/2	3 3/4	6 7/8
16'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				7	2 1/2	3 3/4	6 7/8
17'-5"	1 7/8	1.031	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	2 1/2	3 3/4	6 7/8
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				9	4 1/2	6 3/4	6 7/8	N/A				7	2 1/2	3 3/4	6 7/8
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
21'-5"	2	1.156	CP1152 & CP1153	648	7	3/4	18	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			
26'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 60 PSF, Cont.																						
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped						
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)		
4'-5"	15	3/8	1 5/8	4 9/16	10	3/8	2 5/8	4 9/16	27	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	135	0	133		
4'-5"	8	3/8	2 1/2	5 3/4	14	3/4	5 1/4	5 3/4	15	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	135	0	133		
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1804	437	1784	437		
15'-5"	N/A				N/A				9	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2064	467	2040	469		
16'-5"	N/A				N/A				9	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2099	496	2078	498		
17'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	13	5/16	1997	524	1981	526		
18'-5"	N/A				N/A				9	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2068	554	2054	556		
19'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2267	585	2252	587		
20'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2468	615	2453	617		
21'-5"	N/A				N/A				7	3/4	6 7/8	36	11/16 x 7/8	36	21	3/8	2203	643	2189	644		
22'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	20	3/8	2377	673	2363	674		
23'-5"	N/A				N/A				8	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2553	704	2539	705		
24'-5"	N/A				N/A				8	3/4	7 1/2	32	13/16 x 1	32	17	3/8	2732	735	2718	736		
25'-5"	N/A				N/A				7	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2913	766	2899	766		
26'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3097	796	3083	797		



	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 NON-IMPACT RATED

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 65 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	25	2 5/8	3 15/16	4 9/16	26	3	4 1/2	4 9/16	20	2	3	4 9/16
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	14	2 5/8	3 15/16	5 3/4	14	3	4 1/2	5 3/4	28	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 1/2	0.656	CP1152 & CP1153	546	6	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
16'-5"	1 5/8	0.781	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
17'-5"	1 3/4	0.906	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
18'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
20'-5"	2 3/8	1.531	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	N/A				N/A			
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	N/A				N/A			
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	N/A				N/A			
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	N/A				N/A			
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0236 Minimum Thickness Galvanized or Stainless Steel - 65 PSF, Cont.																				
DBG Up To	Filled CMU											Steel (Wall anchors are the same diameter as assembly fasteners)					Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness				
4'-5"	14	3/8	1 5/8	4 9/16	10	3/8	2 5/8	4 9/16	25	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	146	0	144
4'-5"	8	3/8	2 1/2	5 3/4	13	3/4	5 1/4	5 3/4	14	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	147	0	144
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1976	473	1955	474
15'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2255	506	2229	508
16'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2291	538	2268	540
17'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2341	570	2321	572
18'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2254	600	2238	602
19'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2467	634	2452	636
20'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	20	3/8	2309	665	2293	665
21'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	19	3/8	2396	697	2382	697
22'-5"	N/A				N/A				8	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2583	730	2569	731
23'-5"	N/A				N/A				8	3/4	7 1/2	31	13/16 x 1	31	17	3/8	2774	763	2759	764
24'-5"	N/A				N/A				7	3/4	7 1/2	29	13/16 x 1	29	16	3/8	2967	796	2952	797



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ	Unless otherwise specified, dimensions are in inches & tolerances are:
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM	0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED	DRAWN BY: TJE DWG NO: ES-16-62-CIW	SCALE: B AS NOTED SHEET: 28/53

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 20 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
9'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	36	2 5/8	3 15/16	4 9/16	36	3	4 1/2	4 9/16	30	2	3	4 9/16
9'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	22	2 5/8	3 15/16	5 3/4	22	3	4 1/2	5 3/4	36	3 1/2	5 1/4	5 3/4
13'-5"	1 5/16	0.532	CP1151	333	12	3/8	18	36	2 3/8	4	5 3/16	16	2 5/8	3 15/16	5 3/16	16	3	4 1/2	5 3/16	20	3 1/2	5 1/4	5 3/16
13'-5"	1 5/16	0.532	CP1151	344	12	1/2	18	36	2 1/4	4	5 3/4	36	4 1/2	6 3/4	5 3/4	30	4 1/8	6 3/16	5 3/4	25	3 1/2	5 1/4	5 3/4
14'-5"	1 7/16	0.657	CP1151	333	12	3/8	18	36	2 3/8	4	5 3/16	14	2 5/8	3 15/16	5 3/16	14	3	4 1/2	5 3/16	18	3 1/2	5 1/4	5 3/16
14'-5"	1 7/16	0.657	CP1151	344	12	1/2	18	36	2 1/4	4	5 3/4	33	4 1/2	6 3/4	5 3/4	26	4 1/8	6 3/16	5 3/4	22	3 1/2	5 1/4	5 3/4
15'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	22	2 3/8	5	5 3/16	11	2 5/8	3 15/16	5 3/16	11	3	4 1/2	5 3/16	7	2	3	5 3/16
15'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	22	2 1/4	4	5 3/4	27	4 1/2	6 3/4	5 3/4	22	4 1/8	6 3/16	5 3/4	12	2 1/2	3 3/4	5 3/4
16'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	N/A	N/A	N/A	N/A	9	2 5/8	3 15/16	5 3/16	9	3	4 1/2	5 3/16	6	2	3	5 3/16
16'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	23	4 1/2	6 3/4	5 3/4	18	4 1/8	6 3/16	5 3/4	10	2 1/2	3 3/4	5 3/4
17'-5"	1 1/2	0.719	CP1151	334	12	3/8	15	N/A	N/A	N/A	N/A	9	2 5/8	3 15/16	5 7/16	9	3	4 1/2	5 7/16	5	2	3	5 7/16
17'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	19	4 1/2	6 3/4	5 3/4	16	4 1/8	6 3/16	5 3/4	8	2 1/2	3 3/4	5 3/4
17'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	8	2 5/8	3 15/16	5 7/16	8	3	4 1/2	5 7/16	5	2	3	5 7/16
18'-5"	1 1/2	0.719	CP1151	334	12	3/8	14	N/A	N/A	N/A	N/A	8	2 5/8	3 15/16	5 7/16	8	3	4 1/2	5 7/16	5	2	3	5 7/16
18'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	17	4 1/2	6 3/4	5 3/4	14	4 1/8	6 3/16	5 3/4	7	2 1/2	3 3/4	5 3/4
19'-5"	1 1/2	0.719	CP1151	334	11	3/8	12	N/A	N/A	N/A	N/A	7	2 5/8	3 15/16	5 7/16	7	3	4 1/2	5 7/16	5	2 1/2	3 3/4	5 7/16
19'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	15	4 1/2	6 3/4	5 3/4	12	4 1/8	6 3/16	5 3/4	7	2 1/2	3 3/4	5 3/4
20'-5"	1 1/2	0.656	CP1152	334	10	3/8	11	N/A	N/A	N/A	N/A	6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	4	2 1/2	3 3/4	5 7/16
20'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	22	3 5/8	6	5 3/4	13	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	6	2 1/2	3 3/4	5 3/4
21'-5"	1 1/2	0.656	CP1152	334	9	3/8	10	N/A	N/A	N/A	N/A	5	2 5/8	3 15/16	5 7/16	N/A	N/A	N/A	N/A	6	3 1/2	5 1/4	5 7/16
21'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	36	3 5/8	8	5 3/4	12	4 1/2	6 3/4	5 3/4	9	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
22'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	22	3 5/8	8	5 3/4	11	4 1/2	6 3/4	5 3/4	9	4 1/8	6 3/16	5 3/4	7	3 1/2	5 1/4	5 3/4
23'-5"	2	1.156	CP1152	444	10	5/8	18	36	4 3/8	6	6 1/4	17	4 1/2	6 3/4	6 1/4	14	5 1/8	7 11/16	6 1/4	10	4	6	6 1/4
24'-5"	2	1.156	CP1152	444	10	5/8	18	28	4 3/8	6	6 1/4	15	4 1/2	6 3/4	6 1/4	13	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
25'-5"	2	1.156	CP1152	444	9	5/8	18	19	4 3/8	6	6 1/4	14	4 1/2	6 3/4	6 1/4	12	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
26'-5"	2	1.156	CP1152	445	9	5/8	18	28	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	14	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
27'-5"	2	1.156	CP1152	445	9	5/8	18	22	4 3/8	6	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
28'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
29'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
30'-5"	2	1.156	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
31'-5"	2	1.156	CP1152	445	8	5/8	18	N/A	N/A	N/A	N/A	12	4 1/2	6 3/4	6 13/16	N/A	N/A	N/A	N/A	7	4	6	6 13/16
32'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A	N/A	N/A	N/A	11	4 1/2	6 3/4	6 13/16	N/A	N/A	N/A	N/A	9	5	7 1/2	6 13/16
33'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	10	4 1/2	6 3/4	6 13/16	N/A	N/A	N/A	N/A	9	5	7 1/2	6 13/16
34'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A	N/A	N/A	N/A	10	4 1/2	6 3/4	6 13/16	N/A	N/A	N/A	N/A	9	5	7 1/2	6 13/16
35'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	10	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	8	5	7 1/2	6 7/8
36'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	9	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	8	5	7 1/2	6 7/8
37'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	9	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	8	5	7 1/2	6 7/8
38'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	8	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	7	5	7 1/2	6 7/8
39'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	17	N/A	N/A	N/A	N/A	8	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
40'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A	N/A	N/A	N/A	8	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



24 ELMWOOD AVE 1901 S. LITCHFIELD RD  
MOUNTAINTOP, PA GOODYEAR, AZ  
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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 NON-IMPACT RATED

DRAWN BY: TJE  
SIZE: B  
SCALE: AS NOTED  
SHEET: 29/53  
DWG NO: ES-16-62-CIW

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 20 PSF, Cont.																																				
DBG Up To	Filled CMU												Cracked Concrete Minimum 3,000 PSI Compressive Strength												Steel (Wall anchors are the same diameter as assembly fasteners)			Superimposed Loads								
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Hilti Kwik Bolt TZ				Simpson Strong-Bolt 2				ITW Redhead Trubolt+				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)			
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Distance	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size	Max O.C.					Max O.C.	Min. Thickness	
9'-5"	9	3/8	1 5/8	4 9/16	15	3/8	2 5/8	4 9/16	36	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	36	3/8	1 7/8	3 1/4	4 9/16	36	3/8	2	4	4 9/16	36	7/16 x 5/8	36	36	3/16	0	95	0	95	
9'-5"	12	3/8	2 1/2	5 3/4	8	3/8	2 5/8	5 3/4	36	3/8	5 3/4	22 3/4	3/8	2 5/16	4	5 3/4	36	3/8	2 7/8	4 1/2	5 3/4	36	3/8	2	5	5 3/4	36	7/16 x 5/8	36	36	3/16	0	95	0	95	
13'-5"	9	3/8	2 1/2	5 3/16	8	1/2	3 1/2	5 3/16	27	3/8	5 3/16	36	1/2	3 5/8	6	5 3/16	36	3/8	2 7/8	4 1/2	5 3/16	28 1/2	1/2	2 1/2	4	5 3/16	36	7/16 x 5/8	36	27	3/16	333	135	323	135	
13'-5"	9	1/2	2 1/4	5 3/4	9	1/2	3 1/2	5 3/4	36	1/2	5 3/4	36	1/2	3 5/8	6	5 3/16	36	3/8	2 7/8	4 1/2	5 3/16	22 3/4	1/2	3 3/4	6	5 3/16	36	7/16 x 5/8	36	23	3/16	380	145	372	145	
14'-5"	8	3/8	2 1/2	5 3/16	12	3/4	5 1/4	5 3/16	23	3/8	5 3/16	36	1/2	3 5/8	6	5 3/16	36	3/8	2 7/8	4 1/2	5 3/16	22 3/4	1/2	3 3/4	6	5 3/16	36	7/16 x 5/8	36	35	1/4	382	145	372	145	
14'-5"	8	1/2	2 1/4	5 3/4	8	1/2	3 1/2	5 3/4	35	1/2	5 3/4	36	1/2	3 5/8	6	5 3/16	36	1/2	2 3/4	4 1/2	5 3/4	36	1/2	2 1/2	4	5 3/4	36	9/16 x 3/4	36	30	1/4	458	155	449	155	
15'-5"	8	1/2	3 1/2	5 3/16	10	3/4	5 1/4	5 3/16	19	3/8	5 3/16	16 1/4	1/2	3 5/8	6	5 3/16	36	1/2	3 7/8	6	5 3/16	22 3/4	1/2	3 3/4	8	5 3/16	30	7/16 x 5/8	30	19	3/16	456	155	449	155	
15'-5"	10	1/2	3 1/2	5 3/4	12	3/4	5 1/4	5 3/4	30	1/2	5 3/4	36	1/2	3 5/8	6	5 3/4	36	1/2	2 3/4	4 1/2	5 3/4	22 3/4	1/2	3 3/4	6	5 3/4	36	9/16 x 3/4	36	30	1/4	458	155	449	155	
15'-5"	10	3/4	4 3/8	5 3/16	8	3/4	5 1/4	5 3/16	16	3/8	5 3/16	19	1/2	3 5/8	8	5 3/16	28 1/2	3/4	4 1/8	6 3/4	5 3/16	28 1/2	3/4	4 3/8	7	5 3/16	24	7/16 x 5/8	24	16	3/16	559	165	551	165	
16'-5"	10	3/4	4 3/8	5 3/16	8	3/4	5 1/4	5 3/16	16	3/8	5 3/16	19	1/2	3 5/8	8	5 3/16	28 1/2	3/4	4 1/8	6 3/4	5 3/16	28 1/2	3/4	4 3/8	7	5 3/16	24	7/16 x 5/8	24	16	3/16	559	165	551	165	
16'-5"	8	1/2	3 1/2	5 3/4	10	3/4	5 1/4	5 3/4	24	1/2	5 3/4	36	1/2	3 5/8	8	5 3/16	28 1/2	3/4	4 1/8	6 3/4	5 3/16	28 1/2	3/4	4 3/8	7	5 3/16	21	7/16 x 5/8	21	13	3/16	658	175	651	175	
17'-5"	10	3/4	4 3/8	5 7/16	8	3/4	5 1/4	5 7/16	13	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	22 3/4	3/4	4 1/8	6 3/4	5 7/16	22 3/4	3/4	4 3/8	7	5 7/16	21	7/16 x 5/8	21	13	3/16	658	175	651	175	
17'-5"	8	3/4	3 1/4	5 3/4	8	3/4	5 1/4	5 3/4	21	1/2	5 3/4	22 3/4	1/2	3 5/8	8	5 3/4	36	3/4	4 1/8	6 3/4	5 3/4	36	3/4	4 3/8	7	5 3/4	36	9/16 x 3/4	36	21	1/4	659	175	651	175	
18'-5"	9	3/4	4 3/8	5 7/16	N/A	N/A	N/A	N/A	12	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	28 1/2	3/4	4 3/8	8	5 7/16	18	7/16 x 5/8	18	12	3/16	756	185	749	185	
18'-5"	9	3/4	4 3/8	5 3/4	N/A	N/A	N/A	N/A	18	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	19	3/4	4 3/8	7	5 3/4	16	7/16 x 5/8	16	10	3/16	852	195	845	196	
19'-5"	8	3/4	4 3/8	5 7/16	N/A	N/A	N/A	N/A	10	3/8	5 7/16	22 3/4	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	28 1/2	3/4	4 3/8	8	5 7/16	18	7/16 x 5/8	18	12	3/16	756	185	749	185	
19'-5"	8	3/4	4 3/8	5 3/4	N/A	N/A	N/A	N/A	16	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	22 3/4	3/4	4 3/8	8	5 3/4	29	9/16 x 3/4	29	16	1/4	853	195	845	196	
20'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9	3/8	5 7/16	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	13	7/16 x 5/8	13	9	3/16	1000	206	993	206
20'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14	1/2	5 3/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25	9/16 x 3/4	25	14	1/4	1001	206	993	206
21'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/8	5 7/16	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	12	7/16 x 5/8	12	8	3/16	1098	216	1092	216
21'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	1/2	5 3/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	22	9/16 x 3/4	22	12	1/4	1099	216	1092	216
22'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11	1/2	5 3/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21	9/16 x 3/4	21	11	1/4	1199	226	1191	227
23'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23	5/8	6 1/4	N/A	N/A	N/A	N/A	N/A	36	3/4	5 3/4	8 3/4	6 1/4	22 3/4	5/8	4 3/4	6 1/4	6 1/4	36	11/16 x 7/8	36	23	5/16	946	235	941	235	
24'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	22	5/8	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	N/A	N/A	N/A	N/A	36	11/16 x 7/8	36	22	5/16	1024	245	1018	245	
25'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	5/8	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	N/A	N/A	N/A	N/A	36	11/16 x 7/8	36	20	5/16	1102	255	1096	255	
26'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23	5/8	6 13/16	N/A	N/A	N/A	N/A	N/A	36	3/4	5 3/4	8 3/4	6 13/16	22 3/4	5/8	4 3/4	6 13/16	36	11/16 x 7/8	36	23	5/16	1180	265	1175	266		
27'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21	5/8	6 13/16	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	36	11/16 x 7/8	36	20	5/16	1339	285	1333	286	
28'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	5/8	6 13/16	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	34	11/16 x 7/8	34	19	5/16	1420	295	1414	296	
29'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19	5/8	6 13/16	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	32	11/16 x 7/8	32	18	5/16	1501	306	1495	306	
30'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18	5/8	6 13/16	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	31	11/16 x 7/8	31	17	5/16	1583	316	1577	317	
31'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17	5/8	6 13/16	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	29	11/16 x 7/8	29	16	5/16	1666	326	1660	327	
32'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16	5/8	6 13/16	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	28	11/16 x 7/8	28	15	5/16	1749	336	1743	337	
33'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15	5/8	6 13/16	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	26	11/16 x 7/8	26	14	5/16	1834	347	1828	347	
34'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14	5/8	6 13/16	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	24	11/16 x 7/8	24	13	5/16	1920	357	1913	358	
35'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	5/8	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23	11/16 x 7/8	23	12	5/16	2006	367	2000	368	
36'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	5/8	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	22	11/16 x 7/8	22	12	5/16	2093	378	2087	378	
37'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	5/8	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21	11/16 x 7/8	21	11	5/16	2182	388	2175	389	
38'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11	5/8	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	11/16 x 7/8	20	11	5/16	2271	398	2265	399	
39'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11	5/8	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19	11/16 x 7/8	19	10	5/16	2361	409	2355	409	
40'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	5/8	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19	11/16 x 7/8	19	10	5/16	2361	409	2355	409	



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances	
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L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 30 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
7'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	32	2 5/8	3 15/16	4 9/16	33	3	4 1/2	4 9/16	26	2	3	4 9/16
7'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	18	2 5/8	3 15/16	5 3/4	19	3	4 1/2	5 3/4	36	3 1/2	5 1/4	5 3/4
13'-5"	1 5/16	0.532	CP1151	334	12	3/8	15	N/A				8	2 5/8	3 15/16	5 7/16	9	3	4 1/2	5 7/16	11	3 1/2	5 1/4	5 7/16
13'-5"	1 5/16	0.532	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	19	4 1/2	6 3/4	5 3/4	15	4 1/8	6 3/16	5 3/4	12	3 1/2	5 1/4	5 3/4
14'-5"	1 7/16	0.657	CP1151	334	12	3/8	14	N/A				8	2 5/8	3 15/16	5 7/16	8	3	4 1/2	5 7/16	10	3 1/2	5 1/4	5 7/16
14'-5"	1 7/16	0.657	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	17	4 1/2	6 3/4	5 3/4	14	4 1/8	6 3/16	5 3/4	11	3 1/2	5 1/4	5 3/4
15'-5"	1 1/2	0.719	CP1151	334	11	3/8	12	N/A				7	2 5/8	3 15/16	5 7/16	7	3	4 1/2	5 7/16	4	2	3	5 7/16
15'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	15	4 1/2	6 3/4	5 3/4	12	4 1/8	6 3/16	5 3/4	7	3 1/2	5 1/4	5 3/4
16'-5"	1 1/2	0.656	CP1152	334	10	3/8	10	N/A				6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	4	2	3	5 7/16
16'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	19	3 5/8	6	5 3/4	12	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
17'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	22	3 5/8	8	5 3/4	11	4 1/2	6 3/4	5 3/4	9	4 1/8	6 3/16	5 3/4	7	2 1/2	3 3/4	5 3/4
18'-5"	2	1.156	CP1152	444	10	5/8	18	36	4 3/8	6	6 1/4	16	4 1/2	6 3/4	6 1/4	14	5 1/8	7 11/16	6 1/4	10	5	7 1/2	6 1/4
19'-5"	2	1.156	CP1152	444	10	5/8	18	22	4 3/8	6	6 1/4	15	4 1/2	6 3/4	6 1/4	13	5 1/8	7 11/16	6 1/4	9	5	7 1/2	6 1/4
20'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	6	6 13/16	16	4 1/2	6 3/4	6 13/16	14	7 1/2	11 1/4	6 13/16	10	5	7 1/2	6 13/16
21'-5"	2	1.156	CP1152	445	9	5/8	18	19	4 3/8	6	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	5	7 1/2	6 13/16
22'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	5	7 1/2	6 13/16
23'-5"	2	1.156	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	5	7 1/2	6 13/16
24'-5"	2	1.156	CP1152	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				7	5	7 1/2	6 13/16
25'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
26'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
27'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
28'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	2 1/2	3 3/4	6 7/8
29'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	2 1/2	3 3/4	6 7/8
30'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
31'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
32'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
33'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
34'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	18	N/A				6	4 1/2	6 3/4	6 7/8	N/A				N/A			
35'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
36'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
37'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
38'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
39'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
40'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				7	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:		
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG		
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED		DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: <b>AS NOTED</b>	SHEET: <b>31/53</b>
		DWG NO: <b>ES-16-62-CIW</b>			

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

DBG Up To	Filled CMU												Cracked Concrete Minimum 3,000 PSI Compressive Strength										Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads									
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Hilti Kwik Bolt TZ					Simpson Strong-Bolt 2					ITW Redhead Trubolt+						Welded		Through Bolt		Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness							
7'-5"	18	3/8	2 1/2	4 9/16	13	3/8	2 5/8	4 9/16	32	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	36	3/8	1 7/8	3 1/4	4 9/16	22 3/4	3/8	2	4	4 9/16	36	7/16 x 5/8	36	36	3/16	0	113	0	112			
7'-5"	10	3/8	2 1/2	5 3/4	9	1/2	3 1/2	5 3/4	18	3/8	5 3/4	10 5/16	3/8	2 5/16	5	5 3/4	36	3/8	2 7/8	4 1/2	5 3/4	14 1/4	3/8	2	5	5 3/4	36	7/16 x 5/8	36	36	3/16	0	113	0	112			
13'-5"	9	3/4	4 3/8	5 7/16	N/A				8	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	19	3/4	4 1/8	6 3/4	5 7/16	19	3/4	4 3/8	7	5 7/16	20	7/16 x 5/8	20	13	3/16	677	203	664	203			
13'-5"	11	3/4	4 3/8	5 3/4	8	3/4	5 1/4	5 3/4	19	1/2	5 3/4	19	1/2	3 5/8	8	5 3/4	28 1/2	3/4	4 1/8	6 3/4	5 3/4	36	3/4	4 3/8	7	5 3/4	36	9/16 x 3/4	36	20	1/4	680	203	664	203			
14'-5"	9	3/4	4 3/8	5 7/16	N/A				8	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	28 1/2	3/4	4 3/8	8	5 7/16	19	7/16 x 5/8	19	12	3/16	723	217	712	218			
14'-5"	10	3/4	4 3/8	5 3/4	8	3/4	5 1/4	5 3/4	17	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	19	3/4	4 1/8	6 3/4	5 3/4	22 3/4	3/4	4 3/8	7	5 3/4	34	9/16 x 3/4	34	19	1/4	726	218	712	218			
15'-5"	8	3/4	4 3/8	5 7/16	N/A				7	3/8	5 7/16	28 1/2	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	N/A						17	7/16 x 5/8	17	11	3/16	818	232	808	233		
15'-5"	9	3/4	4 3/8	5 3/4	N/A				15	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	28 1/2	3/4	4 3/8	8	5 3/4	30	9/16 x 3/4	30	16	1/4	820	233	808	233			
16'-5"	N/A				N/A				6	3/8	5 7/16	N/A					N/A					13	7/16 x 5/8	13	9	3/16	1013	248	1003	248								
16'-5"	N/A				N/A				12	1/2	5 3/4	N/A					36	3/4	5 3/4	8 3/4	5 3/4	N/A						24	9/16 x 3/4	24	13	1/4	1015	248	1003	248		
17'-5"	N/A				N/A				11	1/2	5 3/4	N/A					22 3/4	3/4	5 3/4	8 3/4	5 3/4	N/A						21	9/16 x 3/4	21	12	1/4	1156	263	1145	264		
18'-5"	N/A				N/A				16	5/8	6 1/4	N/A					36	3/4	5 3/4	8 3/4	6 1/4	22 3/4	5/8	4 3/4	6 1/4	6 1/4	36	11/16 x 7/8	36	24	5/16	926	276	918	277			
19'-5"	N/A				N/A				15	5/8	6 1/4	N/A					N/A						36	11/16 x 7/8	36	21	5/16	1036	291	1028	292							
20'-5"	N/A				N/A				16	5/8	6 13/16	N/A					36	3/4	5 3/4	8 3/4	6 13/16	N/A						36	11/16 x 7/8	36	23	5/16	1146	306	1138	307		
21'-5"	N/A				N/A				14	5/8	6 13/16	N/A					N/A						36	11/16 x 7/8	36	21	5/16	1256	322	1248	323							
22'-5"	N/A				N/A				13	5/8	6 13/16	N/A					N/A						36	11/16 x 7/8	36	20	5/16	1366	337	1358	338							
23'-5"	N/A				N/A				12	5/8	6 13/16	N/A					N/A						33	11/16 x 7/8	33	18	5/16	1477	352	1469	353							
24'-5"	N/A				N/A				11	5/8	6 13/16	N/A					N/A						31	11/16 x 7/8	31	17	5/16	1589	367	1581	368							
25'-5"	N/A				N/A				11	5/8	6 13/16	N/A					N/A						28	11/16 x 7/8	28	16	5/16	1702	383	1694	384							
26'-5"	N/A				N/A				10	5/8	6 7/8	N/A					N/A						25	11/16 x 7/8	25	14	5/16	1816	398	1808	399							
27'-5"	N/A				N/A				9	5/8	6 7/8	N/A					N/A						24	11/16 x 7/8	24	13	5/16	1931	413	1923	414							
28'-5"	N/A				N/A				9	5/8	6 7/8	N/A					N/A						22	11/16 x 7/8	22	12	5/16	2048	429	2039	430							
29'-5"	N/A				N/A				8	5/8	6 7/8	N/A					N/A						21	11/16 x 7/8	21	11	5/16	2166	444	2157	445							
30'-5"	N/A				N/A				8	5/8	6 7/8	N/A					N/A						20	11/16 x 7/8	20	11	5/16	2285	459	2277	461							
31'-5"	N/A				N/A				8	5/8	6 7/8	N/A					N/A						19	11/16 x 7/8	19	10	5/16	2406	475	2397	476							
32'-5"	N/A				N/A				7	5/8	6 7/8	N/A					N/A						18	11/16 x 7/8	18	10	5/16	2528	491	2519	492							
33'-5"	N/A				N/A				7	5/8	6 7/8	N/A					N/A						17	11/16 x 7/8	17	9	5/16	2652	506	2643	507							
34'-5"	N/A				N/A				6	3/4	6 7/8	N/A					N/A						36	11/16 x 7/8	36	21	3/8	2305	518	2297	519							
35'-5"	N/A				N/A				9	3/4	7 1/2	N/A					N/A						36	13/16 x 1	36	20	3/8	2411	534	2403	534							
36'-5"	N/A				N/A				9	3/4	7 1/2	N/A					N/A						35	13/16 x 1	35	19	3/8	2519	549	2511	550							
37'-5"	N/A				N/A				8	3/4	7 1/2	N/A					N/A						33	13/16 x 1	33	18	3/8	2628	565	2620	565							
38'-5"	N/A				N/A				8	3/4	7 1/2	N/A					N/A						32	13/16 x 1	32	17	3/8	2738	580	2729	581							
39'-5"	N/A				N/A				8	3/4	7 1/2	N/A					N/A						31	13/16 x 1	31	17	3/8	2849	596	2841	596							
40'-5"	N/A				N/A				7	3/4	7 1/2	N/A					N/A						30	13/16 x 1	30	16	3/8	2961	611	2953	612							



	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			
<b>TITLE:</b> WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED	<b>DRAWN BY:</b> TJE	<b>SIZE:</b> B	<b>SCALE:</b> AS NOTED	<b>SHEET:</b> 32/53
	<b>DWG NO:</b> ES-16-62-CIW			

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 40 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
6'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	28	2 5/8	3 15/16	4 9/16	29	3	4 1/2	4 9/16	22	2	3	4 9/16
6'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	16	2 5/8	3 15/16	5 3/4	16	3	4 1/2	5 3/4	32	3 1/2	5 1/4	5 3/4
13'-5"	1 3/8	0.531	CP1152	334	10	3/8	10	N/A				5	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	7	3 1/2	5 1/4	5 7/16
13'-5"	1 3/8	0.531	CP1152	344	10	1/2	18	36	3 5/8	8	5 3/4	12	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152	334	10	3/8	9	N/A				5	2 5/8	3 15/16	5 7/16	N/A				7	3 1/2	5 1/4	5 7/16
14'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	36	3 5/8	8	5 3/4	12	4 1/2	6 3/4	5 3/4	9	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
15'-5"	1 5/8	0.781	CP1152	444	9	5/8	18	36	4 3/8	8	6 1/4	14	4 1/2	6 3/4	6 1/4	12	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
16'-5"	1 3/4	0.906	CP1152	445	9	5/8	18	28	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	14	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
17'-5"	2	1.156	CP1152	445	9	5/8	18	28	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	14	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
18'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
19'-5"	2	1.156	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
20'-5"	2	1.156	CP1152	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
22'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
23'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
24'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
25'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
26'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
27'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				10	5	7 1/2	7 1/2	11	6 5/8	9 15/16	7 1/2	N/A			
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
30'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
31'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
32'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
33'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			
34'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	17	N/A				7	5	7 1/2	7 1/2	N/A				N/A			



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

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

DRAWN BY: TJE  
SIZE: B  
SCALE: AS NOTED  
SHEET: 33/53  
DWG NO: ES-16-62-CIW

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 40 PSF, Cont.																																			
DBG Up To	Filled CMU												Cracked Concrete Minimum 3,000 PSI Compressive Strength												Steel (Wall anchors are the same diameter as assembly fasteners)			Superimposed Loads							
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Hilti Kwik Bolt TZ				Simpson Strong-Bolt 2				ITW Redhead Trubolt+				Welded		Through Bolt	Tapped	Vx (+)	Vy (+)	Vx (-)	Vy (-)			
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Distance	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size					Max O.C.	Max O.C.	Min. Thickness
6'-5"	16	3/8	2 1/2	4 9/16	11	3/8	2 5/8	4 9/16	28	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	36	3/8	1 7/8	3 1/4	4 9/16	36	3/8	2	5	4 9/16	36	7/16 x 5/8	36	36	3/16	0	130	0	129
6'-5"	9	3/8	2 1/2	5 3/4	15	3/4	5 1/4	5 3/4	16	3/8	5 3/4	36	1/2	3 5/8	6	5 3/4	36	3/8	2 7/8	4 1/2	5 3/4	36	1/2	2 1/2	4	5 3/4	36	7/16 x 5/8	36	36	3/16	0	130	0	129
13'-5"	N/A				N/A				5	3/8	5 7/16	N/A				22 3/4	3/4	5 3/4	8 3/4	5 7/16	N/A				13	7/16 x 5/8	13	8	3/16	1022	270	1006	271		
13'-5"	N/A				N/A				12	1/2	5 3/4	N/A				36	3/4	5 3/4	8 3/4	5 3/4	N/A				24	9/16 x 3/4	24	13	1/4	1024	271	1006	271		
14'-5"	N/A				N/A				5	3/8	5 7/16	N/A				N/A				N/A				13	7/16 x 5/8	13	8	3/16	1067	290	1054	291			
14'-5"	N/A				N/A				12	1/2	5 3/4	N/A				28 1/2	3/4	5 3/4	8 3/4	5 3/4	N/A				23	9/16 x 3/4	23	12	1/4	1070	291	1054	291		
15'-5"	N/A				N/A				14	5/8	6 1/4	N/A				22 3/4	3/4	5 3/4	8 3/4	6 1/4	N/A				36	11/16 x 7/8	36	20	5/16	1127	309	1112	310		
16'-5"	N/A				N/A				15	5/8	6 13/16	N/A				36	3/4	5 3/4	8 3/4	6 13/16	N/A				36	11/16 x 7/8	36	23	5/16	1183	329	1170	330		
17'-5"	N/A				N/A				15	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	23	5/16	1156	348	1146	349			
18'-5"	N/A				N/A				14	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	21	5/16	1297	368	1287	370			
19'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				N/A				34	11/16 x 7/8	34	19	5/16	1437	389	1427	390			
20'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				31	11/16 x 7/8	31	17	5/16	1579	409	1568	410			
21'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				27	11/16 x 7/8	27	15	5/16	1720	429	1710	431			
22'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				25	11/16 x 7/8	25	13	5/16	1863	450	1853	451			
23'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				23	11/16 x 7/8	23	12	5/16	2008	470	1997	471			
24'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				21	11/16 x 7/8	21	12	5/16	2154	490	2143	492			
25'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				20	11/16 x 7/8	20	11	5/16	2302	511	2291	512			
26'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				N/A				19	11/16 x 7/8	19	10	5/16	2451	531	2440	533			
27'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				N/A				18	11/16 x 7/8	18	9	5/16	2603	552	2592	554			
28'-5"	N/A				N/A				10	3/4	7 1/2	N/A				N/A				N/A				36	13/16 x 1	36	21	3/8	2282	570	2272	570			
29'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				N/A				36	13/16 x 1	36	20	3/8	2413	590	2403	591			
30'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				N/A				34	13/16 x 1	34	18	3/8	2545	610	2535	611			
31'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				33	13/16 x 1	33	18	3/8	2679	631	2669	632			
32'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				31	13/16 x 1	31	17	3/8	2815	652	2804	652			
33'-5"	N/A				N/A				7	3/4	7 1/2	N/A				N/A				N/A				30	13/16 x 1	30	16	3/8	2952	672	2942	673			
34'-5"	N/A				N/A				7	3/4	7 1/2	N/A				N/A				N/A				28	13/16 x 1	28	15	3/8	3091	693	3080	693			



	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 NON-IMPACT RATED	DRAWN BY: TJE DWG NO: ES-16-62-CIW	SIZE: B SCALE: AS NOTED SHEET: 34/53

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 50 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	26	2 5/8	3 15/16	4 9/16	27	3	4 1/2	4 9/16	21	2	3	4 9/16
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	15	2 5/8	3 15/16	5 3/4	15	3	4 1/2	5 3/4	30	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
16'-5"	1 3/4	0.906	CP1152	445	8	5/8	18	22	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
17'-5"	2	1.156	CP1152	445	8	5/8	18	22	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
18'-5"	2	1.156	CP1152 & CP1153	546	8	5/8	18	N/A				11	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
19'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
20'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
22'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
23'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	DC2	6	3/4	15	11	4 3/4	7 1/8	7 1/2	11	5	7 1/2	7 1/2	N/A				N/A			
26'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
27'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	N/A				N/A			
30'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 50 PSF, Cont.																				
DBG Up To	Filled CMU								Steel (Wall anchors are the same diameter as assembly fasteners)							Superimposed Loads				
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped		Superimposed Loads			
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)
5'-5"	15	3/8	2 1/2	4 9/16	10	3/8	2 5/8	4 9/16	26	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	137	0	136
5'-5"	8	3/8	2 1/2	5 3/4	14	3/4	5 1/4	5 3/4	15	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	138	0	136
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1413	363	1395	363
15'-5"	N/A				N/A				12	5/8	6 13/16	33	11/16 x 7/8	33	18	5/16	1476	387	1458	388
16'-5"	N/A				N/A				12	5/8	6 13/16	32	11/16 x 7/8	32	17	5/16	1538	412	1522	413
17'-5"	N/A				N/A				12	5/8	6 13/16	32	11/16 x 7/8	32	18	5/16	1498	435	1485	437
18'-5"	N/A				N/A				11	5/8	6 7/8	28	11/16 x 7/8	28	15	5/16	1668	461	1656	462
19'-5"	N/A				N/A				10	5/8	6 7/8	25	11/16 x 7/8	25	14	5/16	1839	486	1826	488
20'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	12	5/16	2011	512	1999	513
21'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	11	5/16	2185	537	2172	539
22'-5"	N/A				N/A				8	5/8	6 7/8	19	11/16 x 7/8	19	11	5/16	2361	563	2348	564
23'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2539	588	2526	590
25'-5"	N/A				N/A				8	3/4	7 1/2	15	13/16 x 1	15	15	3/8	2398	636	2387	636
26'-5"	N/A				N/A				8	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2555	662	2543	662
27'-5"	N/A				N/A				8	3/4	7 1/2	32	13/16 x 1	32	17	3/8	2712	687	2700	688
28'-5"	N/A				N/A				8	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2872	713	2860	714
29'-5"	N/A				N/A				7	3/4	7 1/2	29	13/16 x 1	29	15	3/8	3034	739	3022	739
30'-5"	N/A				N/A				7	3/4	7 1/2	27	13/16 x 1	27	15	3/8	3198	764	3186	765



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

P: 800.233.8366  
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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 NON-IMPACT RATED**

DRAWN BY: **TJE**

SIZE: **B**

SCALE: **AS NOTED**

SHEET: **35/53**

DWG NO: **ES-16-62-CIW**

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 60 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	22	2 5/8	3 15/16	4 9/16	23	3	4 1/2	4 9/16	17	2	3	4 9/16
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	28	2 3/8	4	5 3/4	12	2 5/8	3 15/16	5 3/4	13	3	4 1/2	5 3/4	25	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				N/A			
16'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				N/A			
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				N/A			
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				9	4 1/2	6 3/4	6 7/8	N/A				N/A			
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
21'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	DC2	6	3/4	15	11	4 3/4	7 1/8	7 1/2	11	5	7 1/2	7 1/2	N/A				N/A			
26'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 60 PSF, Cont.																					
DBG Up To	Filled CMU											Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)	
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Min. Thickness						
5'-5"	12	3/8	2 1/2	4 9/16	8	3/8	2 5/8	4 9/16	22	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	165	0	163	
5'-5"	8	1/2	3 1/2	5 3/4	11	3/4	5 1/4	5 3/4	12	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	165	0	163	
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1756	436	1735	436	
15'-5"	N/A				N/A				10	5/8	6 7/8	25	11/16 x 7/8	25	14	5/16	1825	465	1804	466	
16'-5"	N/A				N/A				10	5/8	6 7/8	24	11/16 x 7/8	24	13	5/16	1892	494	1874	496	
17'-5"	N/A				N/A				10	5/8	6 7/8	25	11/16 x 7/8	25	14	5/16	1839	523	1825	525	
18'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	12	5/16	2039	553	2024	555	
19'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2240	584	2226	586	
20'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2444	614	2429	616	
21'-5"	N/A				N/A				7	5/8	6 7/8	17	11/16 x 7/8	17	9	5/16	2649	645	2634	647	
25'-5"	N/A				N/A				8	3/4	7 1/2	15	13/16 x 1	15	15	3/8	2898	764	2883	765	
26'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3083	795	3069	796	



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ	Unless otherwise specified, dimensions are in inches & tolerances are:
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM	0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG
<b>TITLE:</b> WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED	<b>DRAWN BY:</b> TJE <b>SIZE:</b> B <b>SCALE:</b> AS NOTED <b>SHEET:</b> 36/53	<b>DWG NO:</b> ES-16-62-CIW

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 65 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	25	2 5/8	3 15/16	4 9/16	26	3	4 1/2	4 9/16	20	2	3	4 9/16
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	14	2 5/8	3 15/16	5 3/4	14	3	4 1/2	5 3/4	28	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
16'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	17	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	DC2	6	3/4	15	11	4 3/4	7 1/8	7 1/2	11	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 65 PSF, Cont.																				
DBG Up To	Filled CMU											Steel (Wall anchors are the same diameter as assembly fasteners)					Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness				
4'-5"	14	3/8	2 1/2	4 9/16	10	3/8	2 5/8	4 9/16	25	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	146	0	144
4'-5"	8	3/8	2 1/2	5 3/4	13	3/4	5 1/4	5 3/4	14	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	147	0	144
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1928	473	1906	473
15'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	13	5/16	2000	504	1977	506
16'-5"	N/A				N/A				9	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2070	536	2050	538
17'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	12	5/16	2010	566	1994	568
18'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	11	5/16	2224	599	2209	602
19'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2441	633	2425	635
20'-5"	N/A				N/A				7	5/8	6 7/8	17	11/16 x 7/8	17	9	5/16	2660	666	2644	668
25'-5"	N/A				N/A				8	3/4	7 1/2	15	13/16 x 1	15	15	3/8	3147	828	3132	829



	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 NON-IMPACT RATED

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 70 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	23	2 5/8	3 15/16	4 9/16	24	3	4 1/2	4 9/16	18	2	3	4 9/16
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	13	2 5/8	3 15/16	5 3/4	13	3	4 1/2	5 3/4	10	2	3	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	546	7	5/8	18	N/A	N/A	N/A	N/A	9	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	7	5	7 1/2	6 7/8
15'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	17	N/A	N/A	N/A	N/A	8	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	7	5	7 1/2	6 7/8
16'-5"	1 3/4	0.906	CP1152 & CP1153	546	6	5/8	16	N/A	N/A	N/A	N/A	8	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A	N/A	N/A	N/A	8	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A	N/A	N/A	N/A	7	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A	N/A	N/A	N/A	7	4 1/2	6 3/4	6 7/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A	N/A	N/A	N/A
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A	N/A	N/A	N/A
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A	N/A	N/A	N/A	8	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A	N/A	N/A	N/A
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A	N/A	N/A	N/A	7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A	N/A	N/A	N/A
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	16	N/A	N/A	N/A	N/A	7	5	7 1/2	7 1/2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 70 PSF, Cont.																				
DBG Up To	Filled CMU											Steel (Wall anchors are the same diameter as assembly fasteners)					Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness				
4'-5"	13	3/8	2 1/2	4 9/16	9	3/8	2 5/8	4 9/16	23	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	157	0	155
4'-5"	8	1/2	3 1/2	5 3/4	12	3/4	5 1/4	5 3/4	13	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	158	0	155
14'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2112	508	2084	510
15'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	21	11/16 x 7/8	21	11	5/16	2174	543	2150	545
16'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2247	577	2226	579
17'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	5/8	6 7/8	21	11/16 x 7/8	21	11	5/16	2180	610	2164	612
18'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2410	646	2393	648
19'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7	5/8	6 7/8	17	11/16 x 7/8	17	9	5/16	2642	682	2625	684
20'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9	3/4	7 1/2	36	13/16 x 1	36	20	3/8	2367	714	2352	715
21'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2568	750	2552	750
22'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	3/4	7 1/2	31	13/16 x 1	31	17	3/8	2771	785	2755	786
23'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7	3/4	7 1/2	29	13/16 x 1	29	16	3/8	2976	821	2961	822
24'-5"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7	3/4	7 1/2	27	13/16 x 1	27	15	3/8	3185	857	3169	858



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

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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 NON-IMPACT RATED

DRAWN BY: TJE  
SIZE: B  
SCALE: AS NOTED  
SHEET: 38/53  
DWG NO: ES-16-62-CIW

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 80 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	20	2 5/8	3 15/16	4 9/16	21	3	4 1/2	4 9/16	16	2	3	4 9/16
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	16	2 3/8	4	5 3/4	11	2 5/8	3 15/16	5 3/4	12	3	4 1/2	5 3/4	9	2	3	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
16'-5"	1 3/4	0.906	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
17'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
18'-5"	2 1/8	1.281	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
19'-5"	2 3/8	1.531	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 80 PSF, Cont.																					
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)					Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Min. Thickness						
4'-5"	11	3/8	2 1/2	4 9/16	8	3/8	2 5/8	4 9/16	20	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	180	0	177	
4'-5"	8	3/4	3 1/4	5 3/4	10	3/4	5 1/4	5 3/4	11	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	180	0	177	
14'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2458	581	2427	584	
15'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2523	621	2496	623	
16'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2602	660	2578	662	
17'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2522	698	2503	700	
18'-5"	N/A				N/A				8	3/4	7 1/2	33	13/16 x 1	33	18	3/8	2637	739	2612	740	
19'-5"	N/A				N/A				8	3/4	7 1/2	33	13/16 x 1	33	18	3/8	2615	777	2596	778	
20'-5"	N/A				N/A				8	3/4	7 1/2	32	13/16 x 1	32	17	3/8	2727	816	2709	817	
21'-5"	N/A				N/A				7	3/4	7 1/2	29	13/16 x 1	29	16	3/8	2954	857	2936	858	



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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 NON-IMPACT RATED

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 90 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	CP0417	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	18	2 5/8	3 15/16	4 9/16	18	3	4 1/2	4 9/16	14	2	3	4 9/16
4'-5"	N/A	N/A	CP0417	344*	12	3/8	24	11	2 3/8	5	5 3/4	10	2 5/8	3 15/16	5 3/4	10	3	4 1/2	5 3/4	20	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	648	6	3/4	18	N/A				6	4 1/2	6 3/4	6 7/8	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
16'-5"	1 3/4	0.906	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			
17'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			
18'-5"	2 1/8	1.281	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			
19'-5"	2 3/8	1.531	CP1152 & CP1153	648	6	3/4	16	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0296 Minimum Thickness Galvanized or Stainless Steel - 90 PSF, Cont.																						
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)	
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness						
4'-5"	10	3/8	2 1/2	4 9/16	8	1/2	3 1/2	4 9/16	18	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	202	0	199		
4'-5"	12	3/4	4 3/8	5 3/4	9	3/4	5 1/4	5 3/4	10	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	203	0	199		
14'-5"	N/A				N/A				6	3/4	6 7/8	31	11/16 x 7/8	31	17	3/8	2819	657	2772	658		
15'-5"	N/A				N/A				8	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2886	701	2845	702		
16'-5"	N/A				N/A				8	3/4	7 1/2	29	13/16 x 1	29	16	3/8	2970	745	2933	746		
17'-5"	N/A				N/A				8	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2875	787	2845	788		
18'-5"	N/A				N/A				7	3/4	7 1/2	29	13/16 x 1	29	16	3/8	2989	832	2962	833		
19'-5"	N/A				N/A				7	3/4	7 1/2	29	13/16 x 1	29	16	3/8	2963	875	2941	876		
20'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3086	919	3067	920		



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

TITLE:	WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED	DRAWN BY:	TJE	SIZE:	B	SCALE:	AS NOTED	SHEET:	40/53
DWG NO:	ES-16-62-CIW								

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 20 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
10'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	35	2 5/8	3 15/16	4 9/16	36	3	4 1/2	4 9/16	27	2	3	4 9/16
10'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	20	2 5/8	3 15/16	5 3/4	20	3	4 1/2	5 3/4	36	3 1/2	5 1/4	5 3/4
13'-5"	1 5/16	0.532	CP1151	333	12	3/8	18	36	2 3/8	4	5 3/16	23	2 5/8	3 15/16	5 3/16	24	3	4 1/2	5 3/16	31	3 1/2	5 1/4	5 3/16
13'-5"	1 5/16	0.532	CP1151	344	12	1/2	18	36	2 1/4	4	5 3/4	36	4 1/2	6 3/4	5 3/4	36	4 1/8	6 3/16	5 3/4	36	3 1/2	5 1/4	5 3/4
14'-5"	1 7/16	0.657	CP1151	333	12	3/8	18	36	2 3/8	4	5 3/16	18	2 5/8	3 15/16	5 3/16	18	3	4 1/2	5 3/16	24	3 1/2	5 1/4	5 3/16
14'-5"	1 7/16	0.657	CP1151	344	12	1/2	18	36	2 1/4	4	5 3/4	36	4 1/2	6 3/4	5 3/4	35	4 1/8	6 3/16	5 3/4	29	3 1/2	5 1/4	5 3/4
15'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	36	2 3/8	4	5 3/16	14	2 5/8	3 15/16	5 3/16	14	3	4 1/2	5 3/16	9	2	3	5 3/16
15'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	2 1/4	4	5 3/4	34	4 1/2	6 3/4	5 3/4	27	4 1/8	6 3/16	5 3/4	15	2 1/2	3 3/4	5 3/4
16'-5"	1 1/2	0.719	CP1151	333	12	3/8	18	16	2 3/8	5	5 3/16	11	2 5/8	3 15/16	5 3/16	11	3	4 1/2	5 3/16	7	2	3	5 3/16
16'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	16	2 1/4	4	5 3/4	26	4 1/2	6 3/4	5 3/4	21	4 1/8	6 3/16	5 3/4	12	2 1/2	3 3/4	5 3/4
17'-5"	1 1/2	0.719	CP1151	333	12	3/8	17	N/A				9	2 5/8	3 15/16	5 3/16	9	3	4 1/2	5 3/16	5	2	3	5 3/16
17'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	22	4 1/2	6 3/4	5 3/4	17	4 1/8	6 3/16	5 3/4	10	2 1/2	3 3/4	5 3/4
18'-5"	1 1/2	0.719	CP1151	334	12	3/8	15	N/A				8	2 5/8	3 15/16	5 7/16	8	3	4 1/2	5 7/16	5	2	3	5 7/16
18'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	18	4 1/2	6 3/4	5 3/4	15	4 1/8	6 3/16	5 3/4	8	2 1/2	3 3/4	5 3/4
19'-5"	1 1/2	0.719	CP1151	334	11	3/8	13	N/A				7	2 5/8	3 15/16	5 7/16	7	3	4 1/2	5 7/16	4	2	3	5 7/16
19'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	16	4 1/2	6 3/4	5 3/4	13	4 1/8	6 3/16	5 3/4	7	2 1/2	3 3/4	5 3/4
20'-5"	1 1/2	0.656	CP1152	334	10	3/8	11	N/A				6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	4	2 1/2	3 3/4	5 7/16
20'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	28	3 5/8	6	5 3/4	14	4 1/2	6 3/4	5 3/4	11	4 1/8	6 3/16	5 3/4	6	2 1/2	3 3/4	5 3/4
21'-5"	1 1/2	0.656	CP1152	334	10	3/8	10	N/A				5	2 5/8	3 15/16	5 7/16	N/A				4	2 1/2	3 3/4	5 7/16
21'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	36	3 5/8	8	5 3/4	12	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
22'-5"	1 1/2	0.656	CP1152	344	9	1/2	18	28	3 5/8	8	5 3/4	11	4 1/2	6 3/4	5 3/4	9	4 1/8	6 3/16	5 3/4	7	3 1/2	5 1/4	5 3/4
23'-5"	2	1.219	CP1151	444	11	5/8	18	36	4 3/8	6	6 1/4	18	4 1/2	6 3/4	6 1/4	15	5 1/8	7 11/16	6 1/4	7	3	4 1/2	6 1/4
24'-5"	2	1.156	CP1152	444	10	5/8	18	36	4 3/8	6	6 1/4	16	4 1/2	6 3/4	6 1/4	14	5 1/8	7 11/16	6 1/4	10	4	6	6 1/4
25'-5"	2	1.156	CP1152	444	10	5/8	18	22	4 3/8	6	6 1/4	15	4 1/2	6 3/4	6 1/4	13	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
26'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	6	6 13/16	16	4 1/2	6 3/4	6 13/16	14	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
27'-5"	2	1.156	CP1152	445	9	5/8	18	28	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
28'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
29'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
30'-5"	2	1.156	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
31'-5"	2	1.156	CP1152	445	8	5/8	18	22	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
32'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				10	5	7 1/2	6 13/16
33'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
34'-5"	2	1.156	CP1152 & CP1153	445	7	5/8	18	N/A				10	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
35'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
36'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
37'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
38'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
39'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
40'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			



	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	DRAWN BY: TJE SIZE: B SCALE: AS NOTED SHEET: 41/53
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED		DWG NO: ES-16-62-CIW

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 20 PSF, Cont.																																					
DBG Up To	Filled CMU												Cracked Concrete Minimum 3,000 PSI Compressive Strength												Steel (Wall anchors are the same diameter as assembly fasteners)			Superimposed Loads									
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Hilti Kwik Bolt TZ				Simpson Strong-Bolt 2				ITW Redhead Trubolt+				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)				
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size	Max O.C.					Max O.C.	Min. Thickness		
10'-5"	8	3/8	1 5/8	4 9/16	13	3/8	2 5/8	4 9/16	35	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	36	3/8	1 7/8	3 1/4	4 9/16	36	3/8	2	4	4 9/16	36	7/16 x 5/8	36	36	3/16	0	105	0	105		
10'-5"	11	3/8	2 1/2	5 3/4	9	1/2	3 1/2	5 3/4	20	3/8	5 3/4	7 1/8	3/8	2 5/16	4	5 3/4	36	3/8	2 7/8	4 1/2	5 3/4	22 3/4	3/8	2	5	5 3/4	36	7/16 x 5/8	36	36	3/16	0	105	0	105		
13'-5"	14	3/8	2 1/2	5 3/16	10	3/8	2 5/8	5 3/16	23	3/8	5 3/16	28 1/2	3/8	2 5/16	4	5 3/16	14 1/4	3/8	1 7/8	3 1/4	5 3/16	36	3/8	2	5	5 3/16	36	7/16 x 5/8	36	36	3/16	207	135	195	135		
13'-5"	14	1/2	2 1/4	5 3/4	14	1/2	3 1/2	5 3/4	36	1/2	5 3/4	19	1/2	2 3/8	4	5 3/4	36	1/2	2 3/4	4 1/2	5 3/4	36	1/2	2 1/2	4	5 3/4	36	9/16 x 3/4	36	36	1/4	210	135	195	135		
14'-5"	11	3/8	2 1/2	5 3/16	9	1/2	3 1/2	5 3/16	18	3/8	5 3/16	36	1/2	3 5/8	6	5 3/16	36	3/8	2 7/8	4 1/2	5 3/16	36	1/2	2 1/2	4	5 3/16	36	7/16 x 5/8	36	33	3/16	272	145	261	145		
14'-5"	11	1/2	2 1/4	5 3/4	11	1/2	3 1/2	5 3/4	36	1/2	5 3/4	36	1/2	3 5/8	6	5 3/4	36	1/2	2 3/4	4 1/2	5 3/4	36	1/2	2 1/2	4	5 3/4	36	9/16 x 3/4	36	36	1/4	274	145	261	145		
15'-5"	8	3/8	2 1/2	5 3/16	12	3/4	5 1/4	5 3/16	14	3/8	5 3/16	36	1/2	3 5/8	6	5 3/16	36	3/8	2 7/8	4 1/2	5 3/16	14 1/4	1/2	2 1/2	4	5 3/16	36	7/16 x 5/8	36	25	3/16	361	155	352	155		
15'-5"	8	1/2	2 1/4	5 3/4	8	1/2	3 1/2	5 3/4	34	1/2	5 3/4	36	1/2	3 5/8	6	5 3/4	36	1/2	2 3/4	4 1/2	5 3/4	36	1/2	2 1/2	4	5 3/4	36	9/16 x 3/4	36	36	1/4	363	155	352	155		
16'-5"	8	3/4	3 1/4	5 3/16	10	3/4	5 1/4	5 3/16	11	3/8	5 3/16	36	1/2	3 5/8	8	5 3/16	28 1/2	1/2	3 7/8	6	5 3/16	19	1/2	3 3/4	8	5 3/16	29	7/16 x 5/8	29	19	3/16	475	165	467	165		
16'-5"	9	1/2	3 1/2	5 3/4	12	3/4	5 1/4	5 3/4	26	1/2	5 3/4	36	1/2	3 5/8	6	5 3/4	28 1/2	1/2	2 3/4	4 1/2	5 3/4	16 1/4	1/2	3 3/4	6	5 3/4	36	9/16 x 3/4	36	28	1/4	477	165	467	165		
17'-5"	10	3/4	4 3/8	5 3/16	8	3/4	5 1/4	5 3/16	9	3/8	5 3/16	36	3/4	5 9/16	8	5 3/16	22 3/4	3/4	4 1/8	6 3/4	5 3/16	22 3/4	3/4	4 3/8	7	5 3/16	23	7/16 x 5/8	23	15	3/16	584	175	576	175		
17'-5"	8	1/2	3 1/2	5 3/4	9	3/4	5 1/4	5 3/4	22	1/2	5 3/4	36	1/2	3 5/8	8	5 3/4	28 1/2	1/2	3 7/8	6	5 3/4	19	1/2	3 3/4	8	5 3/4	36	9/16 x 3/4	36	23	1/4	585	175	576	175		
18'-5"	9	3/4	4 3/8	5 7/16	N/A				8	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	16 1/4	3/4	4 1/8	6 3/4	5 7/16	16 1/4	3/4	4 3/8	7	5 7/16	20	7/16 x 5/8	20	13	3/16	689	185	681	185		
18'-5"	10	3/4	4 3/8	5 3/4	8	3/4	5 1/4	5 3/4	18	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	28 1/2	3/4	4 1/8	6 3/4	5 3/4	28 1/2	3/4	4 3/8	7	5 3/4	36	9/16 x 3/4	36	20	1/4	690	185	681	185		
19'-5"	8	3/4	4 3/8	5 7/16	N/A				7	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	19	3/4	4 3/8	8	5 7/16	17	7/16 x 5/8	17	11	3/16	792	195	784	195		
19'-5"	9	3/4	4 3/8	5 3/4	N/A				16	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	36	3/4	4 3/8	8	5 3/4	31	9/16 x 3/4	31	17	1/4	793	195	784	195		
20'-5"	N/A				N/A				6	3/8	5 7/16	N/A				N/A				N/A				14	7/16 x 5/8	14	9	3/16	945	205	938	206					
20'-5"	8	3/4	4 3/8	5 3/4	N/A				14	1/2	5 3/4	22 3/4	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	N/A				26	9/16 x 3/4	26	14	1/4	947	206	938	206			
21'-5"	N/A				N/A				5	3/8	5 7/16	N/A				N/A				N/A				13	7/16 x 5/8	13	8	3/16	1049	216	1042	216					
21'-5"	N/A				N/A				12	1/2	5 3/4	N/A				N/A				N/A				23	9/16 x 3/4	23	13	1/4	1050	216	1042	216					
22'-5"	N/A				N/A				11	1/2	5 3/4	N/A				N/A				N/A				21	9/16 x 3/4	21	12	1/4	1154	226	1145	226					
23'-5"	8	3/4	4 3/8	6 1/4	N/A				18	5/8	6 1/4	28 1/2	3/4	5 9/16	8	6 1/4	22 3/4	5/8	5 1/8	7 7/8	6 1/4	28 1/2	5/8	4 3/4	6 1/4	6 1/4	36	11/16 x 7/8	36	25	5/16	876	234	871	235		
24'-5"	N/A				N/A				16	5/8	6 1/4	N/A				N/A				N/A				36	11/16 x 7/8	36	22	5/16	986	244	980	245					
25'-5"	N/A				N/A				15	5/8	6 1/4	N/A				N/A				N/A				36	11/16 x 7/8	36	21	5/16	1067	255	1061	255					
26'-5"	N/A				N/A				16	5/8	6 13/16	N/A				N/A				36	3/4	5 3/4	8 3/4	6 13/16	N/A				36	11/16 x 7/8	36	23	5/16	1148	265	1142	265
27'-5"	N/A				N/A				15	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	22	5/16	1229	275	1224	275					
28'-5"	N/A				N/A				14	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	20	5/16	1311	285	1305	285					
29'-5"	N/A				N/A				13	5/8	6 13/16	N/A				N/A				N/A				35	11/16 x 7/8	35	19	5/16	1394	295	1388	296					
30'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				N/A				33	11/16 x 7/8	33	18	5/16	1476	305	1471	306					
31'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				N/A				31	11/16 x 7/8	31	17	5/16	1560	315	1554	316					
32'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				29	11/16 x 7/8	29	16	5/16	1644	325	1638	326					
33'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				28	11/16 x 7/8	28	15	5/16	1729	336	1723	336					
34'-5"	N/A				N/A				10	5/8	6 13/16	N/A				N/A				N/A				27	11/16 x 7/8	27	15	5/16	1815	346	1809	346					
35'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				24	11/16 x 7/8	24	13	5/16	1902	356	1895	357					
36'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				23	11/16 x 7/8	23	13	5/16	1989	366	1983	367					
37'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				22	11/16 x 7/8	22	12	5/16	2077	376	2071	377					
38'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				21	11/16 x 7/8	21	11	5/16	2167	387	2160	387					
39'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				20	11/16 x 7/8	20	11	5/16	2257	397	2250	398					
40'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				19	11/16 x 7/8	19	11	5/16	2348	407	2341	408					



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:		
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG		
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED		DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: <b>AS NOTED</b>	SHEET: <b>42/53</b>
		DWG NO: <b>ES-16-62-CIW</b>			

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 30 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
7'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	32	2 5/8	3 15/16	4 9/16	33	3	4 1/2	4 9/16	26	2	3	4 9/16
7'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	18	2 5/8	3 15/16	5 3/4	19	3	4 1/2	5 3/4	36	3 1/2	5 1/4	5 3/4
13'-5"	1 5/16	0.532	CP1151	333	12	3/8	17	N/A				9	2 5/8	3 15/16	5 3/16	9	3	4 1/2	5 3/16	12	3 1/2	5 1/4	5 3/16
13'-5"	1 5/16	0.532	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	23	4 1/2	6 3/4	5 3/4	18	4 1/8	6 3/16	5 3/4	15	3 1/2	5 1/4	5 3/4
14'-5"	1 7/16	0.657	CP1151	334	12	3/8	15	N/A				9	2 5/8	3 15/16	5 7/16	9	3	4 1/2	5 7/16	11	3 1/2	5 1/4	5 7/16
14'-5"	1 7/16	0.657	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	20	4 1/2	6 3/4	5 3/4	16	4 1/8	6 3/16	5 3/4	13	3 1/2	5 1/4	5 3/4
15'-5"	1 1/2	0.719	CP1151	334	12	3/8	13	N/A				8	2 5/8	3 15/16	5 7/16	8	3	4 1/2	5 7/16	5	2	3	5 7/16
15'-5"	1 1/2	0.719	CP1151	344	12	1/2	18	36	3 5/8	6	5 3/4	17	4 1/2	6 3/4	5 3/4	14	4 1/8	6 3/16	5 3/4	8	2 1/2	3 3/4	5 3/4
16'-5"	1 1/2	0.719	CP1151	334	11	3/8	11	N/A				6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	5	2 1/2	3 3/4	5 7/16
16'-5"	1 1/2	0.719	CP1151	344	11	1/2	18	36	3 5/8	6	5 3/4	14	4 1/2	6 3/4	5 3/4	12	4 1/8	6 3/16	5 3/4	6	2 1/2	3 3/4	5 3/4
17'-5"	1 1/2	0.656	CP1152	334	10	3/8	9	N/A				5	2 5/8	3 15/16	5 7/16	N/A				6	3 1/2	5 1/4	5 7/16
17'-5"	1.5	0.656	CP1152	344	10	1/2	18	36	3.625	8	5.75	12	4.5	6.75	5.75	9	4.125	6.1875	5.75	8	3.5	5.25	5.75
18'-5"	2	1.219	CP1151	444	11	5/8	18	36	4 3/8	6	6 1/4	18	4 1/2	6 3/4	6 1/4	16	5 1/8	7 11/16	6 1/4	7	3	4 1/2	6 1/4
19'-5"	2	1.156	CP1152	444	10	5/8	18	28	4 3/8	6	6 1/4	16	4 1/2	6 3/4	6 1/4	14	5 1/8	7 11/16	6 1/4	10	4	6	6 1/4
20'-5"	2	1.156	CP1152	445	10	5/8	18	36	4 3/8	6	6 13/16	16	4 1/2	6 3/4	6 13/16	15	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
21'-5"	2	1.156	CP1152	445	9	5/8	18	28	4 3/8	6	6 13/16	15	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
22'-5"	2	1.156	CP1152	445	9	5/8	18	36	4 3/8	8	6 13/16	14	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
23'-5"	2	1.156	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
24'-5"	2	1.156	CP1152	445	8	5/8	18	N/A				12	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
25'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
26'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
27'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
28'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
29'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
30'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
31'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
32'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
33'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
34'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	18	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
35'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
36'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
37'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
38'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
39'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
40'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				7	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			



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MOUNTAINTOP, PA GOODYEAR, AZ

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

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

DRAWN BY: TJE  
SIZE: B  
SCALE: AS NOTED  
SHEET: 43/53  
DWG NO: ES-16-62-CIW

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 30 PSF, Cont.																																			
DBG Up To	Filled CMU												Cracked Concrete Minimum 3,000 PSI Compressive Strength												Steel (Wall anchors are the same diameter as assembly fasteners)				Superimposed Loads						
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Hilti Kwik Bolt TZ				Simpson Strong-Bolt 2				ITW Redhead Trubolt+				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)		
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Distance	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size	Max O.C.					Max O.C.	Min. Thickness
7'-5"	18	3/8	1 5/8	4 9/16	13	3/8	2 5/8	4 9/16	32	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	36	3/8	1 7/8	3 1/4	4 9/16	22 3/4	3/8	2	4	4 9/16	36	7/16 x 5/8	36	36	3/16	0	113	0	112
7'-5"	10	3/8	2 1/2	5 3/4	9	1/2	3 1/2	5 3/4	18	3/8	5 3/4	10 5/16	3/8	2 5/16	5	5 3/4	36	3/8	2 7/8	4 1/2	5 3/4	14 1/4	3/8	2	5	5 3/4	36	7/16 x 5/8	36	36	3/16	0	113	0	112
13'-5"	10	3/4	4 3/8	5 3/16	8	3/4	5 1/4	5 3/16	9	3/8	5 3/16	19	1/2	3 5/8	8	5 3/16	36	3/4	4 1/8	6 3/4	5 3/16	28 1/2	3/4	4 3/8	7	5 3/16	25	7/16 x 5/8	25	16	3/16	551	203	536	203
13'-5"	8	1/2	3 1/2	5 3/4	10	3/4	5 1/4	5 3/4	23	1/2	5 3/4	36	1/2	3 5/8	8	5 3/4	36	1/2	3 7/8	6	5 3/4	28 1/2	1/2	3 3/4	8	5 3/4	36	9/16 x 3/4	36	24	1/4	554	203	536	203
14'-5"	10	3/4	4 3/8	5 7/16	8	3/4	5 1/4	5 7/16	9	3/8	5 7/16	N/A				N/A				22	7/16 x 5/8	22	14	3/16	615	217	602	217							
14'-5"	8	3/4	3 1/4	5 3/4	9	3/4	5 1/4	5 3/4	20	1/2	5 3/4	28 1/2	1/2	3 5/8	8	5 3/4	19	1/2	3 7/8	6	5 3/4	36	3/4	4 3/8	7	5 3/4	36	9/16 x 3/4	36	22	1/4	617	218	602	217
15'-5"	9	3/4	4 3/8	5 7/16	N/A				8	3/8	5 7/16	36	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	28 1/2	3/4	4 3/8	8	5 7/16	19	7/16 x 5/8	19	12	3/16	723	232	712	232
15'-5"	10	3/4	4 3/8	5 3/4	N/A				17	1/2	5 3/4	36	3/4	5 9/16	8	5 3/4	19	3/4	4 1/8	6 3/4	5 3/4	22 3/4	3/4	4 3/8	7	5 3/4	34	9/16 x 3/4	34	19	1/4	725	233	712	232
16'-5"	N/A				N/A				6	3/8	5 7/16	19	3/4	5 9/16	8	5 7/16	36	3/4	5 3/4	8 3/4	5 7/16	N/A				16	7/16 x 5/8	16	10	3/16	872	247	861	248	
16'-5"	8	3/4	4 3/8	5 3/4	N/A				14	1/2	5 3/4	28 1/2	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	N/A				28	9/16 x 3/4	28	15	1/4	874	248	861	248	
17'-5"	N/A				N/A				5	3/8	5 7/16	N/A				N/A				12	7/16 x 5/8	12	8	3/16	1080	263	1069	263							
17'-5"	N/A				N/A				12	1/2	5 3/4	N/A				28.5	0.75	5.75	8.75	5.75	N/A				23	9/16 x 3/4	23	12	0.25	1082	263	1069	263		
18'-5"	8	3/4	4 3/8	6 1/4	N/A				18	5/8	6 1/4	19	5/8	4 7/16	8	6 1/4	28 1/2	5/8	5 1/8	7 7/8	6 1/4	36	5/8	4 3/4	6 1/4	6 1/4	36	11/16 x 7/8	36	27	5/16	829	276	821	277
19'-5"	N/A				N/A				16	5/8	6 1/4	N/A				N/A				N/A				36	11/16 x 7/8	36	23	5/16	976	291	968	292			
20'-5"	N/A				N/A				16	5/8	6 13/16	22 3/4	3/4	5 9/16	8	6 13/16	36	3/4	5 3/4	8 3/4	6 13/16	N/A				36	11/16 x 7/8	36	25	5/16	1092	306	1083	307	
21'-5"	N/A				N/A				15	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	22	5/16	1206	321	1198	322			
22'-5"	N/A				N/A				14	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	20	5/16	1321	336	1313	337			
23'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				N/A				34	11/16 x 7/8	34	19	5/16	1436	352	1428	353			
24'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				N/A				31	11/16 x 7/8	31	17	5/16	1551	367	1543	368			
25'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				29	11/16 x 7/8	29	16	5/16	1667	382	1659	383			
26'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				26	11/16 x 7/8	26	14	5/16	1784	397	1775	398			
27'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				24	11/16 x 7/8	24	13	5/16	1901	412	1893	413			
28'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				23	11/16 x 7/8	23	12	5/16	2020	428	2011	429			
29'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				21	11/16 x 7/8	21	12	5/16	2140	443	2131	444			
30'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				20	11/16 x 7/8	20	11	5/16	2261	458	2252	459			
31'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				19	11/16 x 7/8	19	10	5/16	2383	474	2374	475			
32'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				N/A				18	11/16 x 7/8	18	10	5/16	2507	489	2498	490			
33'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				N/A				17	11/16 x 7/8	17	9	5/16	2632	504	2623	506			
34'-5"	N/A				N/A				7	3/4	6 7/8	N/A				N/A				N/A				36	11/16 x 7/8	36	21	3/8	2286	517	2278	518			
35'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				N/A				36	13/16 x 1	36	20	3/8	2394	533	2386	533			
36'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				N/A				35	13/16 x 1	35	19	3/8	2502	548	2494	549			
37'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				34	13/16 x 1	34	18	3/8	2612	563	2604	564			
38'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				32	13/16 x 1	32	17	3/8	2723	579	2714	579			
39'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				31	13/16 x 1	31	17	3/8	2835	594	2826	595			
40'-5"	N/A				N/A				7	3/4	7 1/2	N/A				N/A				N/A				30	13/16 x 1	30	16	3/8	2948	609	2939	610			



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	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM			
<b>TITLE:</b> WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED	<b>DRAWN BY:</b> TJE	<b>SIZE:</b> B	<b>SCALE:</b> AS NOTED	<b>SHEET:</b> 44/53
	<b>DWG NO:</b> ES-16-62-CIW			

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 40 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
7'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	24	2 5/8	3 15/16	4 9/16	25	3	4 1/2	4 9/16	19	2	3	4 9/16
7'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	36	2 3/8	4	5 3/4	14	2 5/8	3 15/16	5 3/4	14	3	4 1/2	5 3/4	28	3 1/2	5 1/4	5 3/4
13'-5"	1 5/16	0.469	CP1152	334	10	3/8	10	N/A				6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	7	3 1/2	5 1/4	5 7/16
13'-5"	1 5/16	0.469	CP1152	344	10	1/2	18	22	3 5/8	6	5 3/4	13	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	8	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152	334	10	3/8	10	N/A				6	2 5/8	3 15/16	5 7/16	6	3	4 1/2	5 7/16	4	2 1/2	3 3/4	5 7/16
14'-5"	1 1/2	0.656	CP1152	344	10	1/2	18	22	3 5/8	6	5 3/4	13	4 1/2	6 3/4	5 3/4	10	4 1/8	6 3/16	5 3/4	6	2 1/2	3 3/4	5 3/4
15'-5"	1 5/8	0.781	CP1152	444	10	5/8	18	28	4 3/8	6	6 1/4	15	4 1/2	6 3/4	6 1/4	13	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
16'-5"	1 3/4	0.906	CP1152	444	9	5/8	18	36	4 3/8	8	6 1/4	14	4 1/2	6 3/4	6 1/4	12	5 1/8	7 11/16	6 1/4	9	4	6	6 1/4
17'-5"	2	1.156	CP1152	445	10	5/8	18	36	4 3/8	6	6 13/16	16	4 1/2	6 3/4	6 13/16	15	7 1/2	11 1/4	6 13/16	10	4	6	6 13/16
18'-5"	2	1.156	CP1152	445	9	5/8	18	22	4 3/8	6	6 13/16	14	4 1/2	6 3/4	6 13/16	13	7 1/2	11 1/4	6 13/16	9	4	6	6 13/16
19'-5"	2	1.156	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
20'-5"	2	1.156	CP1152	445	8	5/8	18	19	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	N/A				7	4	6	6 13/16
21'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
22'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
23'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
24'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
25'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
26'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
27'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
28'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	18	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
30'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
31'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
32'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
33'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				7	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			
34'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	17	N/A				7	5	7 1/2	7 1/2	N/A				N/A			
35'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			



	24 ELMWOOD AVE 1901 S. LITCHFIELD RD MOUNTAINTOP, PA GOODYEAR, AZ		Unless otherwise specified, dimensions are in inches & tolerances are:		
	P: 800.233.8366 F: 800.526.0841 E: ADS@CORNELLIRON.COM		0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG		
TITLE: WIND LOAD CONFIGURATION NON-INSULATED ROLLING STEEL DOOR CP0020 SLAT NON-IMPACT RATED		DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: AS NOTED	SHEET: <b>45/53</b>
DWG NO:			<b>ES-16-62-CIW</b>		

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 40 PSF, Cont.																																								
DBG Up To	Filled CMU												Cracked Concrete Minimum 3,000 PSI Compressive Strength												Steel (Wall anchors are the same diameter as assembly fasteners)			Superimposed Loads												
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Hilti Kwik Bolt TZ				Simpson Strong-Bolt 2				ITW Redhead Trubolt+				Welded		Through Bolt	Tapped	Vx (+)	Vy (+)	Vx (-)	Vy (-)								
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max. O.C.	Dia.	Edge Distance	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Dia.	Embed.	Min Wall Thick.	Edge Dist	Max O.C.	Slot Size					Max O.C.	Max O.C.	Min. Thickness					
7'-5"	14	3/8	2 1/2	4 9/16	9	3/8	2 5/8	4 9/16	24	3/8	4 9/16	36	3/8	2 5/16	4	4 9/16	22 3/4	3/8	1 7/8	3 1/4	4 9/16	36	3/8	2 7/8	4 1/2	5 3/4	16 1/4	1/2	2 1/2	4	5 3/4	36	7/16 x 5/8	36	36	3/16	0	150	0	149
7'-5"	8	3/8	2 1/2	5 3/4	13	3/4	5 1/4	5 3/4	14	3/8	5 3/4	36	1/2	3 5/8	6	5 3/4	36	3/8	2 7/8	4 1/2	5 3/4	16 1/4	1/2	2 1/2	4	5 3/4	36	7/16 x 5/8	36	36	3/16	0	150	0	149					
13'-5"	N/A				N/A				6	3/8	5 7/16	N/A				28 1/2	3/4	5 3/4	8 3/4	5 7/16	N/A				14	7/16 x 5/8	14	9	3/16	986	270	967	271							
13'-5"	N/A				N/A				13	1/2	5 3/4	19	3/4	5 9/16	8	5 3/4	36	3/4	5 3/4	8 3/4	5 3/4	N/A				25	9/16 x 3/4	25	14	1/4	989	271	967	271						
14'-5"	N/A				N/A				6	3/8	5 7/16	N/A				N/A				N/A				14	7/16 x 5/8	14	9	3/16	959	290	944	290								
14'-5"	N/A				N/A				13	1/2	5 3/4	N/A				N/A				N/A				25	9/16 x 3/4	25	14	1/4	961	290	944	290								
15'-5"	N/A				N/A				15	5/8	6 1/4	N/A				36	3/4	5 3/4	8 3/4	6 1/4	N/A				36	11/16 x 7/8	36	22	5/16	1031	309	1015	310							
16'-5"	N/A				N/A				14	5/8	6 1/4	N/A				N/A				N/A				36	11/16 x 7/8	36	21	5/16	1098	329	1085	330								
17'-5"	N/A				N/A				16	5/8	6 13/16	N/A				36	3/4	5 3/4	8 3/4	6 13/16	N/A				36	11/16 x 7/8	36	25	5/16	1082	348	1071	349							
18'-5"	N/A				N/A				14	5/8	6 13/16	N/A				N/A				N/A				36	11/16 x 7/8	36	22	5/16	1230	368	1220	369								
19'-5"	N/A				N/A				13	5/8	6 13/16	N/A				N/A				N/A				35	11/16 x 7/8	35	19	5/16	1378	388	1367	389								
20'-5"	N/A				N/A				12	5/8	6 13/16	N/A				N/A				N/A				32	11/16 x 7/8	32	17	5/16	1524	408	1514	410								
21'-5"	N/A				N/A				11	5/8	6 13/16	N/A				N/A				N/A				29	11/16 x 7/8	29	16	5/16	1671	429	1661	430								
22'-5"	N/A				N/A				10	5/8	6 7/8	N/A				N/A				N/A				25	11/16 x 7/8	25	14	5/16	1818	449	1808	450								
23'-5"	N/A				N/A				9	5/8	6 7/8	N/A				N/A				N/A				23	11/16 x 7/8	23	13	5/16	1967	469	1956	470								
24'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				22	11/16 x 7/8	22	12	5/16	2116	489	2105	491								
25'-5"	N/A				N/A				8	5/8	6 7/8	N/A				N/A				N/A				20	11/16 x 7/8	20	11	5/16	2267	510	2256	511								
25'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				N/A				19	11/16 x 7/8	19	10	5/16	2419	530	2408	532								
27'-5"	N/A				N/A				7	5/8	6 7/8	N/A				N/A				N/A				18	11/16 x 7/8	18	10	5/16	2573	551	2562	552								
28'-5"	N/A				N/A				7	3/4	6 7/8	N/A				N/A				N/A				36	11/16 x 7/8	36	21	3/8	2255	569	2245	569								
29'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				N/A				36	13/16 x 1	36	20	3/8	2387	589	2377	590								
30'-5"	N/A				N/A				9	3/4	7 1/2	N/A				N/A				N/A				35	13/16 x 1	35	19	3/8	2521	609	2511	610								
31'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				33	13/16 x 1	33	18	3/8	2657	630	2646	630								
32'-5"	N/A				N/A				8	3/4	7 1/2	N/A				N/A				N/A				31	13/16 x 1	31	17	3/8	2794	650	2783	651								
33'-5"	N/A				N/A				7	3/4	7 1/2	N/A				N/A				N/A				30	13/16 x 1	30	16	3/8	2932	671	2922	671								
34'-5"	N/A				N/A				7	3/4	7 1/2	N/A				N/A				N/A				28	13/16 x 1	28	15	3/8	3072	691	3062	692								
35'-5"	N/A				N/A				7	3/4	7 1/2	N/A				N/A				N/A				27	13/16 x 1	27	15	3/8	3214	711	3203	712								



	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 NON-IMPACT RATED

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 50 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
6'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	22	2 5/8	3 15/16	4 9/16	23	3	4 1/2	4 9/16	18	2	3	4 9/16
6'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	28	2 3/8	4	5 3/4	12	2 5/8	3 15/16	5 3/4	13	3	4 1/2	5 3/4	25	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152	445	8	5/8	18	36	4 3/8	8	6 13/16	13	4 1/2	6 3/4	6 13/16	12	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
16'-5"	1 3/4	0.906	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
17'-5"	2	1.156	CP1152	445	8	5/8	18	28	4 3/8	8	6 13/16	12	4 1/2	6 3/4	6 13/16	11	7 1/2	11 1/4	6 13/16	8	4	6	6 13/16
18'-5"	2	1.156	CP1152 & CP1153	445	8	5/8	18	N/A				11	4 1/2	6 3/4	6 13/16	N/A				10	5	7 1/2	6 13/16
19'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
20'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
21'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
22'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
23'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	DC2	6	3/4	15	11	4 3/4	7 1/8	7 1/2	11	5	7 1/2	7 1/2	N/A				N/A			
27'-5"	2 1/2	1.656	CP1152 & CP1153	DC3	6	3/4	15	11	4 3/4	7 1/8	7 1/2	11	5	7 1/2	7 1/2	N/A				N/A			
28'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			
29'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			
30'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 50 PSF, Cont.																						
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)	
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness						
6'-5"	12	3/8	2 1/2	4 9/16	9	3/8	2 5/8	4 9/16	22	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	162	0	161		
6'-5"	8	1/2	3 1/2	5 3/4	12	3/4	5 1/4	5 3/4	12	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	163	0	161		
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1304	362	1284	363		
15'-5"	N/A				N/A				13	5/8	6 13/16	35	11/16 x 7/8	35	19	5/16	1380	387	1361	388		
16'-5"	N/A				N/A				12	5/8	6 13/16	33	11/16 x 7/8	33	18	5/16	1453	411	1437	412		
17'-5"	N/A				N/A				12	5/8	6 13/16	34	11/16 x 7/8	34	19	5/16	1423	435	1410	436		
18'-5"	N/A				N/A				11	5/8	6 13/16	30	11/16 x 7/8	30	17	5/16	1601	460	1588	462		
19'-5"	N/A				N/A				10	5/8	6 7/8	26	11/16 x 7/8	26	14	5/16	1779	486	1766	487		
20'-5"	N/A				N/A				9	5/8	6 7/8	24	11/16 x 7/8	24	13	5/16	1957	511	1944	512		
21'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	12	5/16	2136	536	2123	538		
22'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2316	561	2303	563		
23'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2498	587	2484	589		
25'-5"	N/A				N/A				8	3/4	7 1/2	15	13/16 x 1	15	15	3/8	2364	635	2352	636		
27'-5"	N/A				N/A				N/A				11	13/16 x 1	11	11	3/8	2682	686	2670	686	
28'-5"	N/A				N/A				8	3/4	7 1/2	31	13/16 x 1	31	16	3/8	2845	711	2832	712		
29'-5"	N/A				N/A				7	3/4	7 1/2	29	13/16 x 1	29	16	3/8	3008	737	2996	738		
30'-5"	N/A				N/A				7	3/4	7 1/2	27	13/16 x 1	27	15	3/8	3174	762	3162	763		



	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 NON-IMPACT RATED		DRAWN BY: TJE DWG NO: ES-16-62-CIW	SIZE: B SCALE: AS NOTED SHEET: 47/53

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 60 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
6'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	18	2 5/8	3 15/16	4 9/16	19	3	4 1/2	4 9/16	15	2	3	4 9/16
6'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	16	2 3/8	5	5 3/4	10	2 5/8	3 15/16	5 3/4	11	3	4 1/2	5 3/4	21	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152 & CP1153	445	7	5/8	18	N/A				10	4 1/2	6 3/4	6 13/16	N/A				9	5	7 1/2	6 13/16
16'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				9	5	7 1/2	6 7/8
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
19'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
21'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	DC2	6	3/4	15	11	4 3/4	7 1/8	7 1/2	11	5	7 1/2	7 1/2	N/A				N/A			
27'-5"	2 1/2	1.656	CP1152 & CP1153	DC3	6	3/4	15	11	4 3/4	7 1/8	7 1/2	11	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 60 PSF, Cont.																					
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)					Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness					
6'-5"	10	3/8	2 1/2	4 9/16	9	1/2	3 1/2	4 9/16	18	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	195	0	193	
6'-5"	8	3/4	3 1/4	5 3/4	10	3/4	5 1/4	5 3/4	10	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	195	0	193	
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1648	435	1625	436	
15'-5"	N/A				N/A				10	5/8	6 13/16	28	11/16 x 7/8	28	15	5/16	1729	464	1707	466	
16'-5"	N/A				N/A				10	5/8	6 7/8	26	11/16 x 7/8	26	14	5/16	1808	494	1789	495	
17'-5"	N/A				N/A				10	5/8	6 7/8	26	11/16 x 7/8	26	14	5/16	1765	522	1750	524	
18'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	13	5/16	1972	553	1957	554	
19'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	11	5/16	2180	583	2165	585	
20'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2390	613	2374	615	
21'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2600	644	2585	646	
25'-5"	N/A				N/A				8	3/4	7 1/2	15	13/16 x 1	15	15	3/8	2863	762	2849	763	
27'-5"	N/A				N/A				N/A				11	13/16 x 1	11	11	3/8	3241	823	3227	824



	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 NON-IMPACT RATED	
DRAWN BY: <b>TJE</b>	SIZE: <b>B</b>	SCALE: AS NOTED	SHEET: <b>48/53</b>
DWG NO: <b>ES-16-62-CIW</b>			

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 65 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	20	2 5/8	3 15/16	4 9/16	21	3	4 1/2	4 9/16	16	2	3	4 9/16
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	16	2 3/8	4	5 3/4	11	2 5/8	3 15/16	5 3/4	12	3	4 1/2	5 3/4	23	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	DC1	8	1/2	12	8	3 1/2	5 1/4	5 3/4	8	4 1/2	6 3/4	5 3/4	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	18	N/A				10	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
16'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
18'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
20'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	13	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
25'-5"	2 1/2	1.656	CP1152 & CP1153	DC2	6	3/4	15	11	4 3/4	7 1/8	7 1/2	11	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 65 PSF, Cont.																					
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)					Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped					
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Dist	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)	
5'-5"	11	3/8	2 1/2	4 9/16	8	3/8	2 5/8	4 9/16	20	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	179	0	177	
5'-5"	8	3/4	3 1/4	5 3/4	10	3/4	5 1/4	5 3/4	11	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	179	0	177	
14'-5"	N/A				N/A				8	1/2	5 3/4	12	9/16 x 3/4	12	12	1/4	1820	472	1796	472	
15'-5"	N/A				N/A				10	5/8	6 7/8	24	11/16 x 7/8	24	13	5/16	1904	503	1880	505	
16'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	13	5/16	1986	535	1965	537	
17'-5"	N/A				N/A				9	5/8	6 7/8	24	11/16 x 7/8	24	13	5/16	1935	566	1919	568	
18'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	12	5/16	2158	599	2142	601	
19'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2381	632	2365	634	
20'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	9	5/16	2606	665	2590	667	
25'-5"	N/A				N/A				8	3/4	7 1/2	15	13/16 x 1	15	15	3/8	3113	826	3097	827	



	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 NON-IMPACT RATED	DRAWN BY: TJE DWG NO: ES-16-62-CIW	SIZE: B SCALE: AS NOTED SHEET: 49/53

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 70 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	19	2 5/8	3 15/16	4 9/16	19	3	4 1/2	4 9/16	15	2	3	4 9/16
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	6	2 3/8	4	5 3/4	10	2 5/8	3 15/16	5 3/4	11	3	4 1/2	5 3/4	21	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
15'-5"	1 5/8	0.781	CP1152 & CP1153	546	7	5/8	18	N/A				9	4 1/2	6 3/4	6 7/8	N/A				8	5	7 1/2	6 7/8
16'-5"	1 3/4	0.906	CP1152 & CP1153	546	7	5/8	17	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
17'-5"	2	1.156	CP1152 & CP1153	546	7	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				7	5	7 1/2	6 7/8
18'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
19'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	9	6 5/8	9 15/16	7 1/2	N/A			
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
23'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			
24'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 70 PSF, Cont.																						
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)	
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Min. Thickness	Max O.C.	Min. Thickness					
5'-5"	10	3/8	2 1/2	4 9/16	9	1/2	3 1/2	4 9/16	19	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	192	0	190		
5'-5"	8	3/4	3 1/4	5 3/4	10	3/4	5 1/4	5 3/4	10	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	193	0	190		
14'-5"	N/A				N/A				9	5/8	6 7/8	23	11/16 x 7/8	23	13	5/16	2002	507	1973	509		
15'-5"	N/A				N/A				9	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2078	542	2053	544		
16'-5"	N/A				N/A				8	5/8	6 7/8	21	11/16 x 7/8	21	12	5/16	2163	576	2141	578		
17'-5"	N/A				N/A				8	5/8	6 7/8	22	11/16 x 7/8	22	12	5/16	2106	609	2089	612		
18'-5"	N/A				N/A				7	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2343	645	2326	647		
19'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2582	680	2564	683		
20'-5"	N/A				N/A				9	3/4	7 1/2	36	13/16 x 1	36	20	3/8	2314	713	2298	714		
21'-5"	N/A				N/A				8	3/4	7 1/2	34	13/16 x 1	34	18	3/8	2519	749	2503	749		
22'-5"	N/A				N/A				8	3/4	7 1/2	32	13/16 x 1	32	17	3/8	2726	784	2710	785		
23'-5"	N/A				N/A				7	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2936	819	2920	820		
24'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3148	855	3132	856		



	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 NON-IMPACT RATED	DRAWN BY: TJE DWG NO: ES-16-62-CIW	SIZE: B SCALE: AS NOTED SHEET: 50/53

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 80 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
5'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	16	2 5/8	3 15/16	4 9/16	17	3	4 1/2	4 9/16	13	2	3	4 9/16
5'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	N/A				9	2 5/8	3 15/16	5 3/4	9	3	4 1/2	5 3/4	19	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	546	6	5/8	16	N/A				8	4 1/2	6 3/4	6 7/8	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152 & CP1153	546	6	5/8	15	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
16'-5"	1 3/4	0.906	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
17'-5"	2	1.156	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
18'-5"	2 1/4	1.406	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
19'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				9	5	7 1/2	7 1/2	10	6 5/8	9 15/16	7 1/2	N/A			
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
21'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			
22'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 80 PSF, Cont.																						
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped		Vx (+)	Vy (+)	Vx (-)	Vy (-)	
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness						
5'-5"	9	3/8	2 1/2	4 9/16	8	1/2	3 1/2	4 9/16	16	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	220	0	217		
5'-5"	11	3/4	4 3/8	5 3/4	8	3/4	5 1/4	5 3/4	9	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	220	0	217		
14'-5"	N/A				N/A				8	5/8	6 7/8	20	11/16 x 7/8	20	11	5/16	2348	580	2316	582		
15'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2427	619	2399	622		
16'-5"	N/A				N/A				7	5/8	6 7/8	18	11/16 x 7/8	18	10	5/16	2518	659	2493	661		
17'-5"	N/A				N/A				7	5/8	6 7/8	19	11/16 x 7/8	19	10	5/16	2447	697	2428	699		
18'-5"	N/A				N/A				9	3/4	7 1/2	35	13/16 x 1	35	19	3/8	2437	737	2414	737		
19'-5"	N/A				N/A				9	3/4	7 1/2	35	13/16 x 1	35	19	3/8	2444	775	2425	776		
20'-5"	N/A				N/A				8	3/4	7 1/2	32	13/16 x 1	32	17	3/8	2674	815	2655	816		
21'-5"	N/A				N/A				7	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2905	856	2887	857		
22'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3140	896	3122	897		



	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 NON-IMPACT RATED

L'TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 90 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	18	2 5/8	3 15/16	4 9/16	18	3	4 1/2	4 9/16	14	2	3	4 9/16
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	11	2 3/8	5	5 3/4	10	2 5/8	3 15/16	5 3/4	10	3	4 1/2	5 3/4	20	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	546	6	5/8	14	N/A				7	4 1/2	6 3/4	6 7/8	N/A				N/A			
15'-5"	1 5/8	0.781	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	8	6 5/8	9 15/16	7 1/2	N/A			
16'-5"	1 3/4	0.906	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
17'-5"	2	1.156	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
18'-5"	2 1/4	1.406	CP1152 & CP1153	648	6	3/4	18	N/A				8	5	7 1/2	7 1/2	7	6 5/8	9 15/16	7 1/2	N/A			
19'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	17	N/A				7	5	7 1/2	7 1/2	6	6 5/8	9 15/16	7 1/2	N/A			
20'-5"	2 1/2	1.656	CP1152 & CP1153	648	6	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 90 PSF, Cont.																					
DBG Up To	Filled CMU											Steel (Wall anchors are the same diameter as assembly fasteners)					Superimposed Loads				
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt			Welded		Through Bolt	Tapped						
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)	
4'-5"	10	3/8	2 1/2	4 9/16	8	1/2	3 1/2	4 9/16	18	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	202	0	199	
4'-5"	12	3/4	4 3/8	5 3/4	9	3/4	5 1/4	5 3/4	10	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	203	0	199	
14'-5"	N/A				N/A				7	5/8	6 7/8	17	11/16 x 7/8	17	9	5/16	2694	653	2658	656	
15'-5"	N/A				N/A				8	3/4	7 1/2	31	13/16 x 1	31	17	3/8	2791	699	2748	700	
16'-5"	N/A				N/A				8	3/4	7 1/2	30	13/16 x 1	30	16	3/8	2886	743	2848	744	
17'-5"	N/A				N/A				8	3/4	7 1/2	31	13/16 x 1	31	17	3/8	2801	786	2770	787	
18'-5"	N/A				N/A				8	3/4	7 1/2	31	13/16 x 1	31	17	3/8	2773	829	2748	830	
19'-5"	N/A				N/A				7	3/4	7 1/2	31	13/16 x 1	31	17	3/8	2777	872	2757	873	
20'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3033	918	3013	919	



	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 NON-IMPACT RATED

L/TR	REVISION	DATE	BY	E.C.O.
*	ORIGINAL ISSUE	10/16/14	TJE	1615
A	REFORMATTED TABLES; HOOD SUPPORT UPDATE	02/14/20	MAN	2027

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 100 PSF																							
Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners)																							
DBG Up To	Windlock Flat Location	Slip	Windlock	Guide Assembly	Windlock Weld Pitch	Assembly Fastener Diameter	Assembly Fastener Spacing	Hilti Kwik Bolt 3				Simpson Wedge All				Red Head Tru-Bolt				Powers Wedge-Bolt			
								Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist	Max O.C.	Embed	Min. Wall Thick.	Edge Dist
4'-5"	N/A	N/A	N/A	333*	N/A	3/8	24	36	2 3/8	4	4 9/16	16	2 5/8	3 15/16	4 9/16	16	3	4 1/2	4 9/16	13	2	3	4 9/16
4'-5"	N/A	N/A	N/A	344*	N/A	3/8	24	N/A				9	2 5/8	3 15/16	5 3/4	9	3	4 1/2	5 3/4	18	3 1/2	5 1/4	5 3/4
14'-5"	1 1/2	0.656	CP1152 & CP1153	648	5	3/4	18	N/A				7	5	7 1/2	7 1/2	5	6 5/8	9 15/16	7 1/2	N/A			
15'-5"	1 5/8	0.781	CP1152 & CP1153	648	5	3/4	17	N/A				7	5	7 1/2	7 1/2	N/A				N/A			
16'-5"	1 3/4	0.906	CP1152 & CP1153	648	5	3/4	17	N/A				7	5	7 1/2	7 1/2	N/A				N/A			
17'-5"	2	1.156	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			
18'-5"	2 1/4	1.406	CP1152 & CP1153	648	5	3/4	16	N/A				7	5	7 1/2	7 1/2	N/A				N/A			
19'-5"	2 1/2	1.656	CP1152 & CP1153	648	5	3/4	15	N/A				7	5	7 1/2	7 1/2	N/A				N/A			

CP0020 - 0.0405 Minimum Thickness Galvanized or Stainless Steel - 100 PSF, Cont.																						
DBG Up To	Filled CMU												Steel (Wall anchors are the same diameter as assembly fasteners)						Superimposed Loads			
	Hilti Kwik Bolt 3				Simpson Strong-Bolt 2				Through Bolt				Welded		Through Bolt	Tapped		Superimposed Loads				
	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Embed	Edge Dist	Max O.C.	Dia.	Edge Distance	Max O.C.	Slot Size	Max O.C.	Max O.C.	Min. Thickness	Vx (+)	Vy (+)	Vx (-)	Vy (-)		
4'-5"	9	3/8	2 1/2	4 9/16	15	3/4	5 1/4	4 9/16	16	3/8	4 9/16	36	7/16 x 5/8	36	36	3/16	0	224	0	221		
4'-5"	11	3/4	4 3/8	5 3/4	8	3/4	5 1/4	5 3/4	9	3/8	5 3/4	36	7/16 x 5/8	36	36	3/16	0	225	0	221		
14'-5"	N/A				N/A				7	3/4	7 1/2	29	13/16 x 1	29	15	3/8	3057	728	3004	729		
15'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3142	777	3095	778		
16'-5"	N/A				N/A				7	3/4	7 1/2	27	13/16 x 1	27	14	3/8	3243	826	3201	827		
17'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3144	874	3110	875		
18'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3109	921	3081	923		
19'-5"	N/A				N/A				7	3/4	7 1/2	28	13/16 x 1	28	15	3/8	3111	969	3089	970		



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