

YKK AP AMERICA, Inc.

YHC 300 IG CURTAIN WALL SYSTEM

(HVHZ) (IMPACT)

INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN, UNLESS OTHERWISE STATED.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBERS OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/2 INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITH OUT CONSIDERATION OF TOLERANCE). TOLERANCE ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- REFER TO SECTIONS 7 & 8 FOR ANCHOR TYPE, SUBSTRATE STRENGTH, EMBEDMENT, & EDGE DISTANCE REQUIREMENTS. FOLLOW MANUFACTURER INSTALLATION INSTRUCTIONS FOR INSTALLATION OF ANCHORS.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER. ADHESIVE ANCHORS MUST BE INSTALLED BY PERSONNEL CERTIFIED FOR THE SPECIFIED ANCHOR INSTALLATION.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- | | |
|--------|--|
| STEP 1 | DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD. |
| STEP 2 | SEE CHARTS ON SECTION 6 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE. |
| STEP 3 | CHECK MULLION CAPACITY FOR A GIVEN SPACING, HEIGHT, SINGLE SPAN, TWIN SPAN, MULTIPLE SPANS, AND CORNERS ON SECTION 4. |
| STEP 4 | USING HEAD/SILL ANCHOR DETAILS, SELECT ANCHOR OPTION FROM TABLES ON SECTIONS 7-8 WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE. |
| STEP 5 | CHECK INTERMEDIATE ANCHOR CAPACITY FOR MULTIPLE SPANS USING CHARTS OR DETAILS ON SECTION 8. |
| STEP 6 | THE LOWEST VALUE RESULTING FROM STEPS 2, 3, 4 AND 5 SHALL APPLY TO ENTIRE SYSTEM. |

GENERAL NOTES

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BUILDING CODE, INCLUDING REQUIREMENTS FOR HVHZ.
- ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY , 2X AND STEEL STUD FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND THE INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITION CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN , A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
- THIS PRODUCT DOES NOT REQUIRE IMPACT PROTECTIVE DEVICES.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE CURRENT FLORIDA BUILDING CODE.

TABLE OF CONTENTS	
SECTION	SECTION DESCRIPTION
1	GENERAL AND INSTALLATION NOTES
2	ELEVATION
3	VERTICAL SECTIONS
4	HORIZONTAL SECTIONS
5	DOOR CONNECTION DETAILS
6	GLAZING DETAILS
7	F, T & S ANCHOR DETAILS
8	DEAD/WIND LOAD ANCHOR DETAILS
9	COMPONENTS & BILL OF MATERIALS



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

GENERAL AND INSTALLATION NOTES

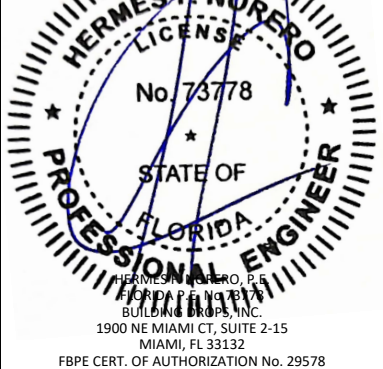
PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com

BUILDING DROPS

REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

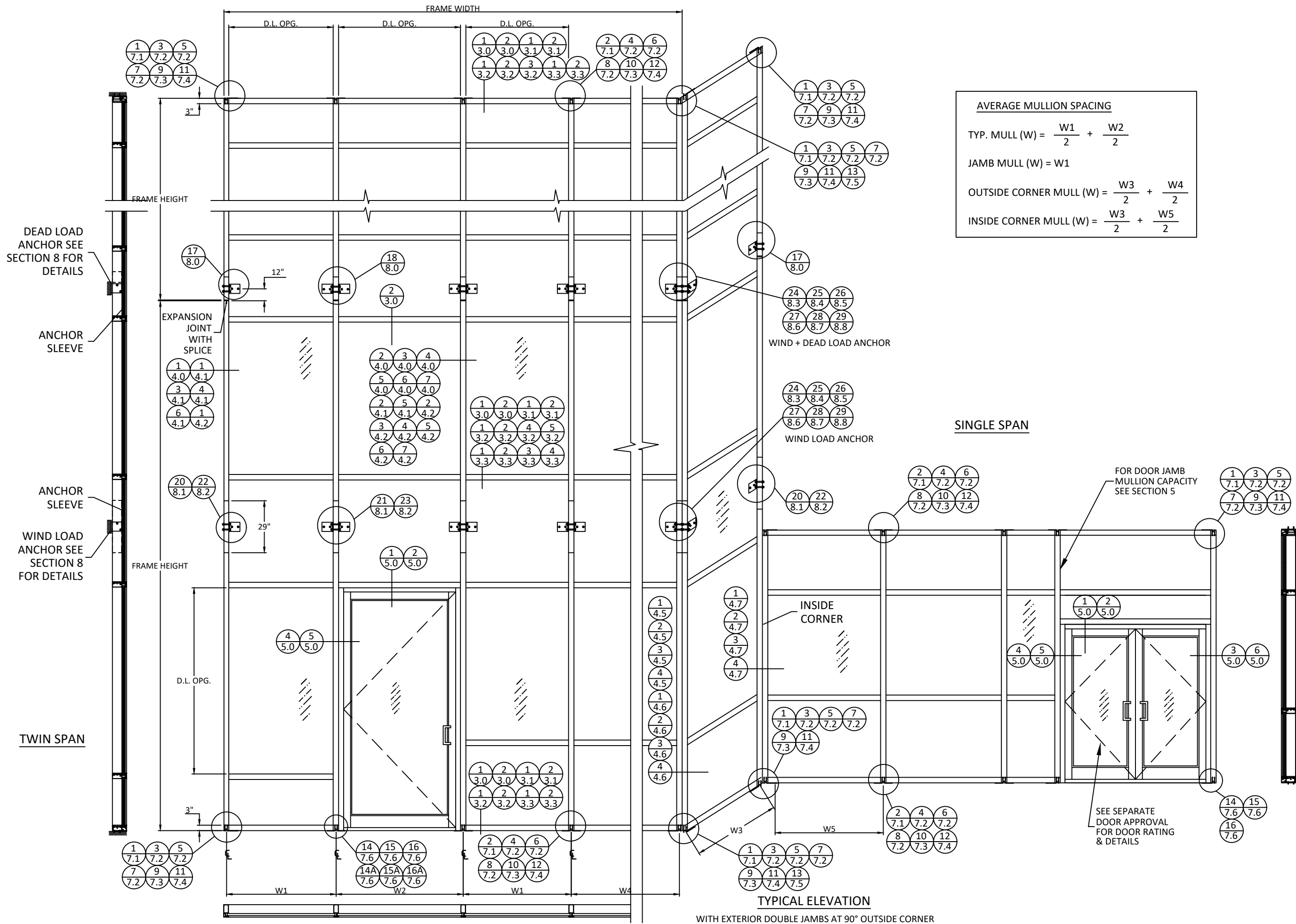
THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT

Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2026.06.03 18:49:33 -0400



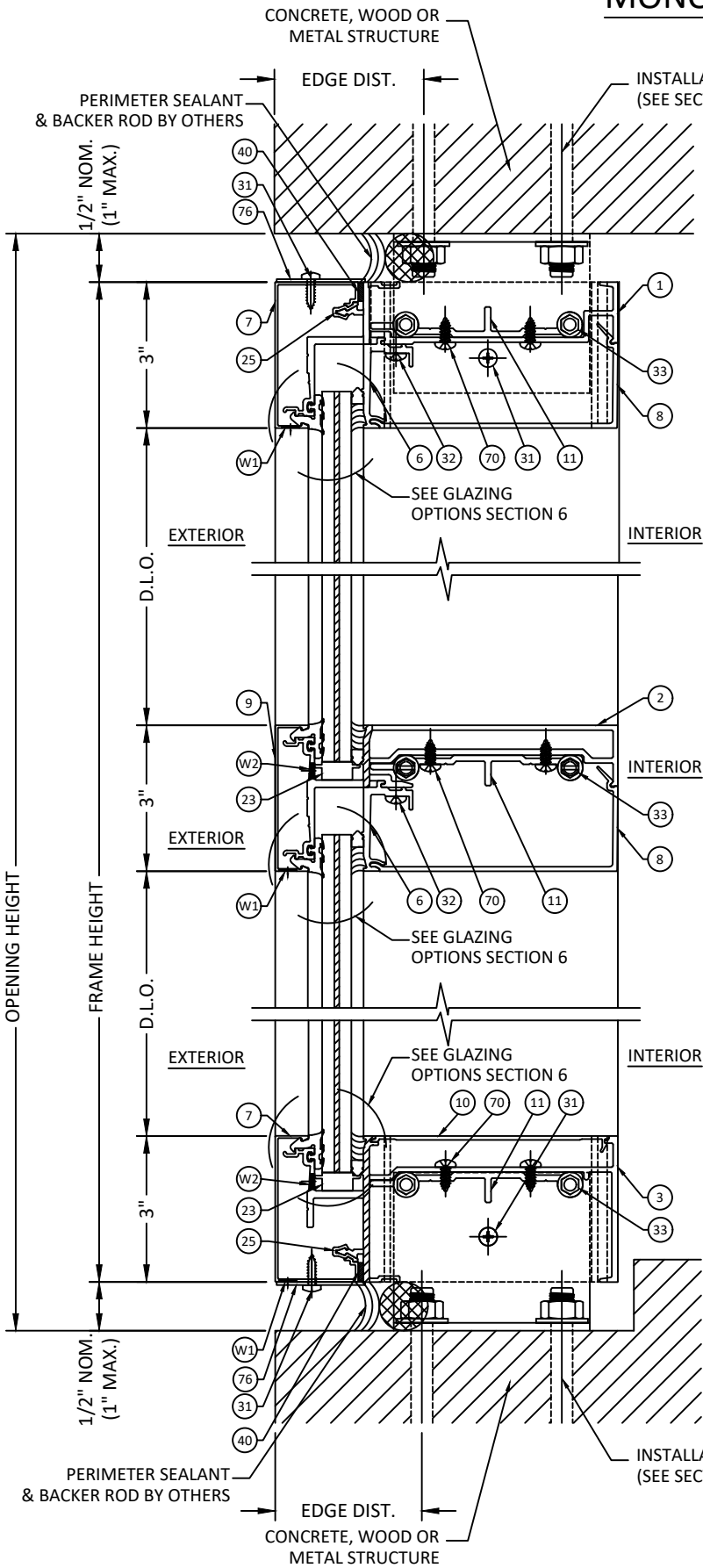
FL #:	FL14217
DATE:	07.31.17
DWG. BY:	CHK. BY:
AR/RV	HFN
SCALE:	NTS
DWG. #:	YKK211
SECTION	1.0
[Page 1 of 48]	

c:\users\luciano\documents\projects\ykk\ap america, inc\flc-21-1229-1 - fbc submittal - revisions\dwgs\apc - upload\fl14217\hvh\ykk 211 - fl14217 dwgs 1 thru 4 - cover, elev. vert & horz dlt.dwg
6/7/2026 11:54 AM



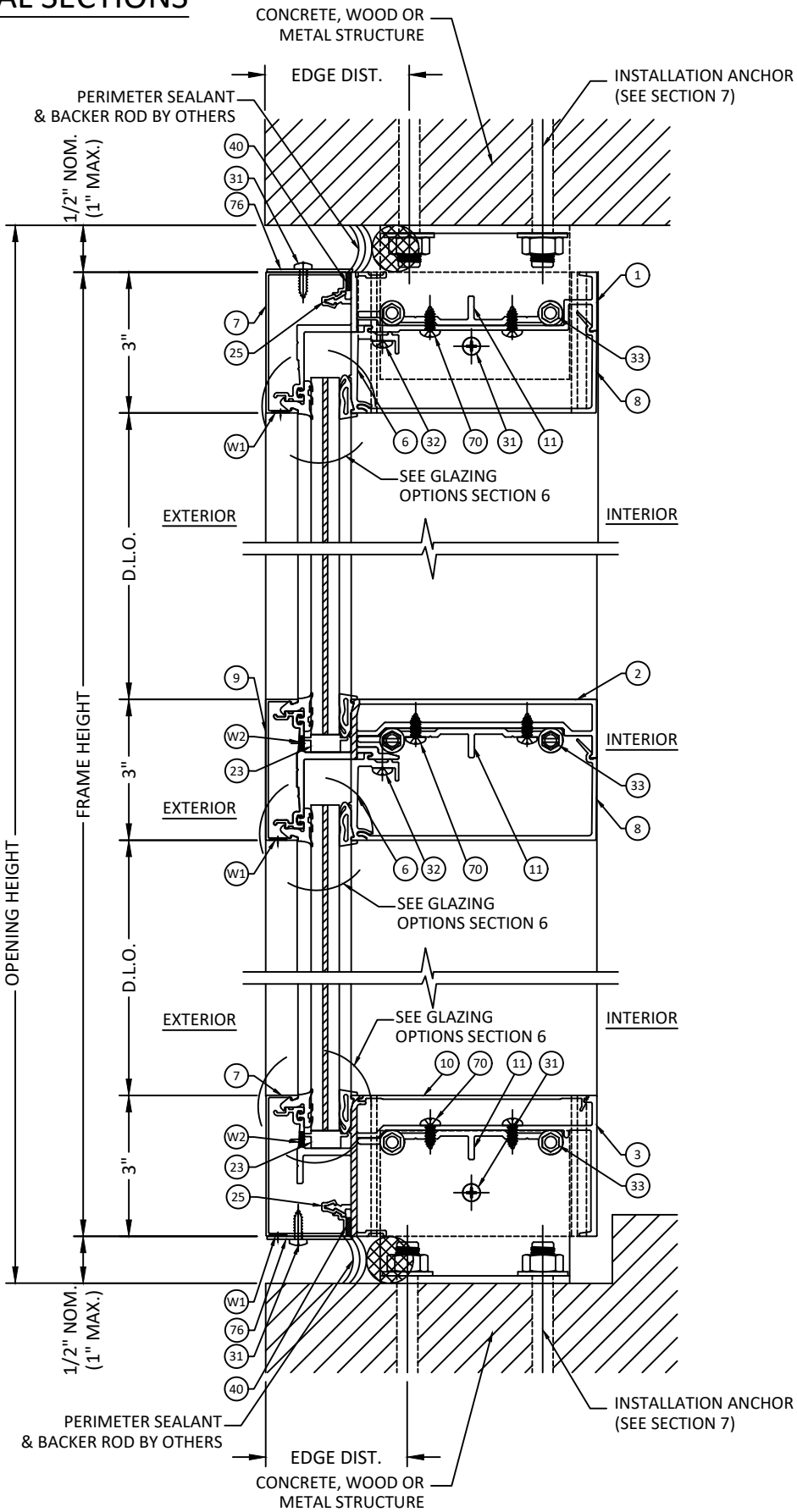
c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229-1 - fbc submittal - revisions\dwgs\apc upload\014217\hvh\ykk 211 - f14217 dwgs 1 thru 4 - cover, elev. vert & horz dlt.dwg 6/2/2026 11:54 AM

MONO. STANDARD MULLIONS - VERTICAL SECTIONS



WEEPHOLES:
W1 = 5/16" DIA. WEEP HOLES TWO PER D.L. OPNG.
= AT 1/3 POINTS FROM VERTICALS
W2 = 5/16" DIA. WEEP HOLES THREE PER LITE
= AT 3" FROM VERTICALS AND CENTER OF D.L. OPNG.

NOTE:
SOLID SHIM UP TO 1/4" MAY BE USED BETWEEN
ANCHOR & SUBSTRATE INCREASING THE CAULK
JOINT TO 1" ALLOWABLE UNDER THIS
CONDITION.



1
3.0 VERTICAL SECTION
MONO. STANDARD HORIZONTAL
MONOLITHIC GLASS - WET GLAZED

2
3.0 VERTICAL SECTION
MONO. STANDARD HORIZONTAL
MONOLITHIC GLASS - DRY GLAZED



Quality
inspires™

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

VERTICAL SECTIONS

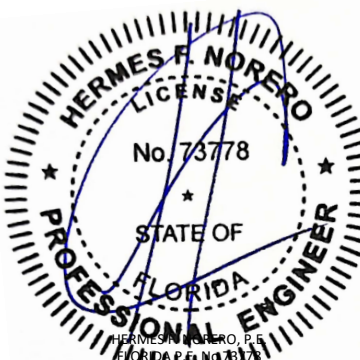
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT



HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
FL14217

DATE: **07.31.17**

DWG. BY:
AR/RV

CHK. BY:
HFN

SCALE: **NTS**

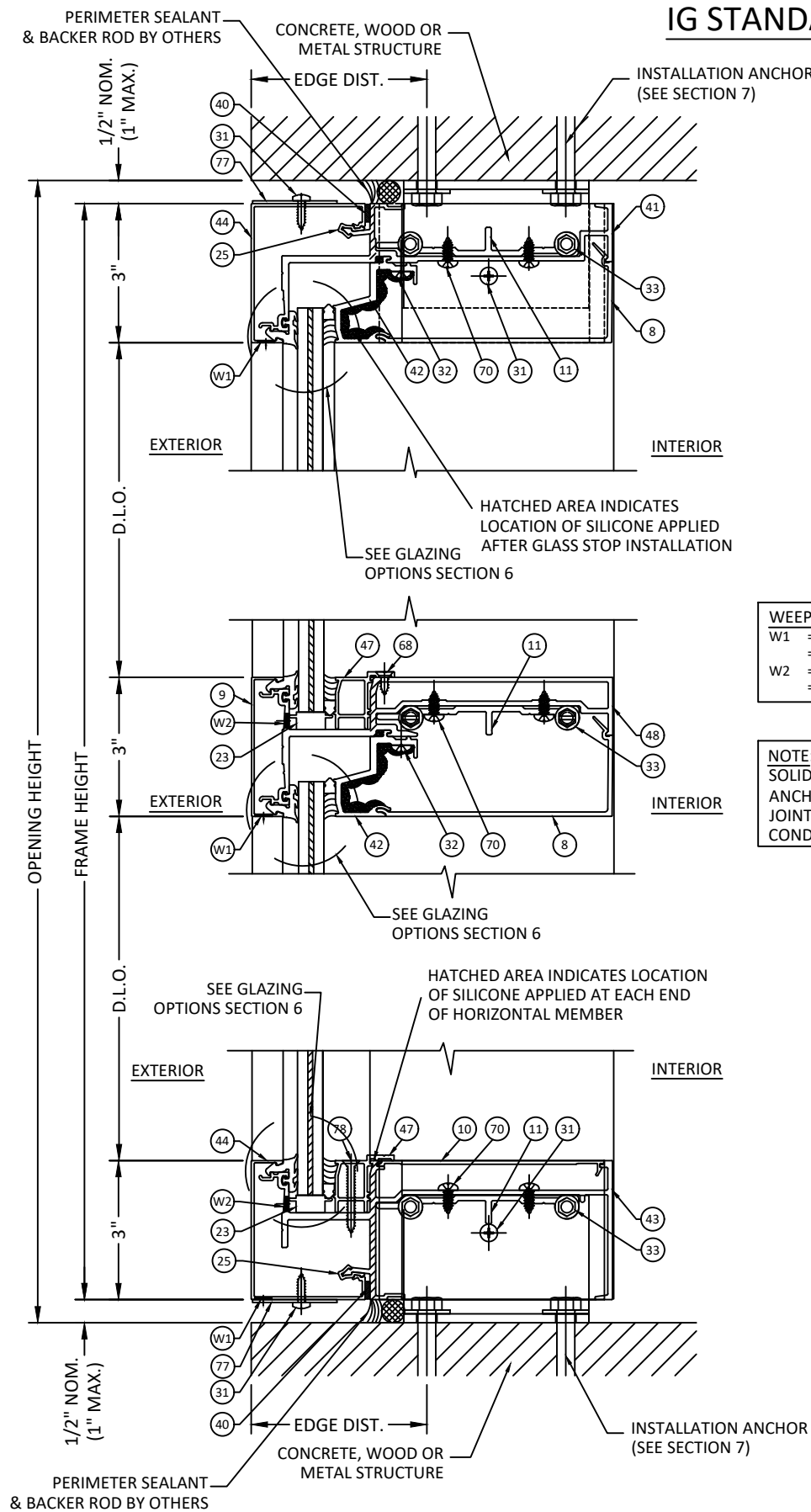
DWG. #: **YKK211**

SECTION
3.0

[Page 3 of 48]

c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229\1 - fbc submittal - revisions\dwg\apc upload\014217\hvh\ykk 211 - f14217 dwgs 1 thru 4 - cover, elev. vert & horz.dtl.dwg 6/2/2026 11:54 AM

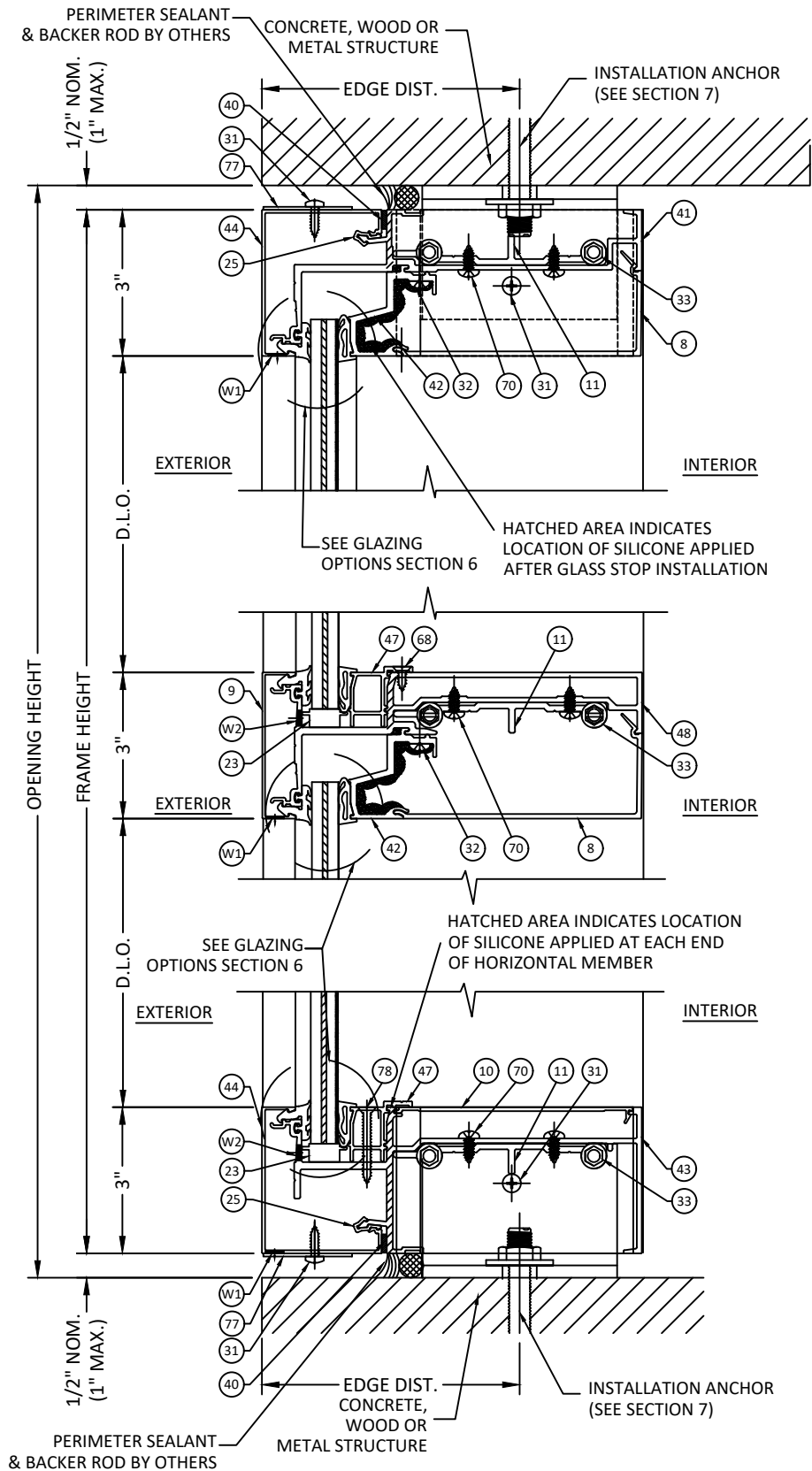
IG STANDARD MULLIONS - VERTICAL SECTIONS



1
3.1 VERTICAL SECTION
IG STANDARD HORIZONTAL
MONOLITHIC GLASS - WET GLAZED

WEEPHOLES:
W1 = 5/16" DIA. WEEP HOLES TWO PER D.L. OPNG.
= AT 1/3 POINTS FROM VERTICALS
W2 = 5/16" DIA. WEEP HOLES THREE PER LITE
= AT 3" FROM VERTICALS AND CENTER OF D.L. OPNG.

NOTE:
SOLID SHIM UP TO 1/4" MAY BE USED BETWEEN
ANCHOR & SUBSTRATE INCREASING THE CAULK
JOINT TO 1" ALLOWABLE UNDER THIS
CONDITION.



2
3.1 VERTICAL SECTION
IG STANDARD HORIZONTAL
MONOLITHIC GLASS - DRY GLAZED



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

VERTICAL SECTIONS

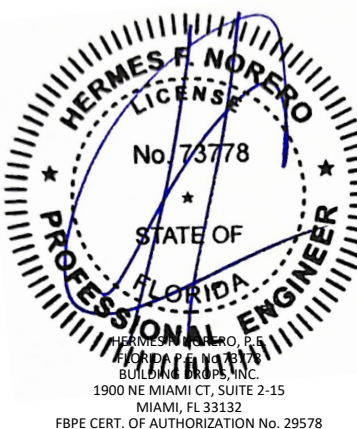
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT

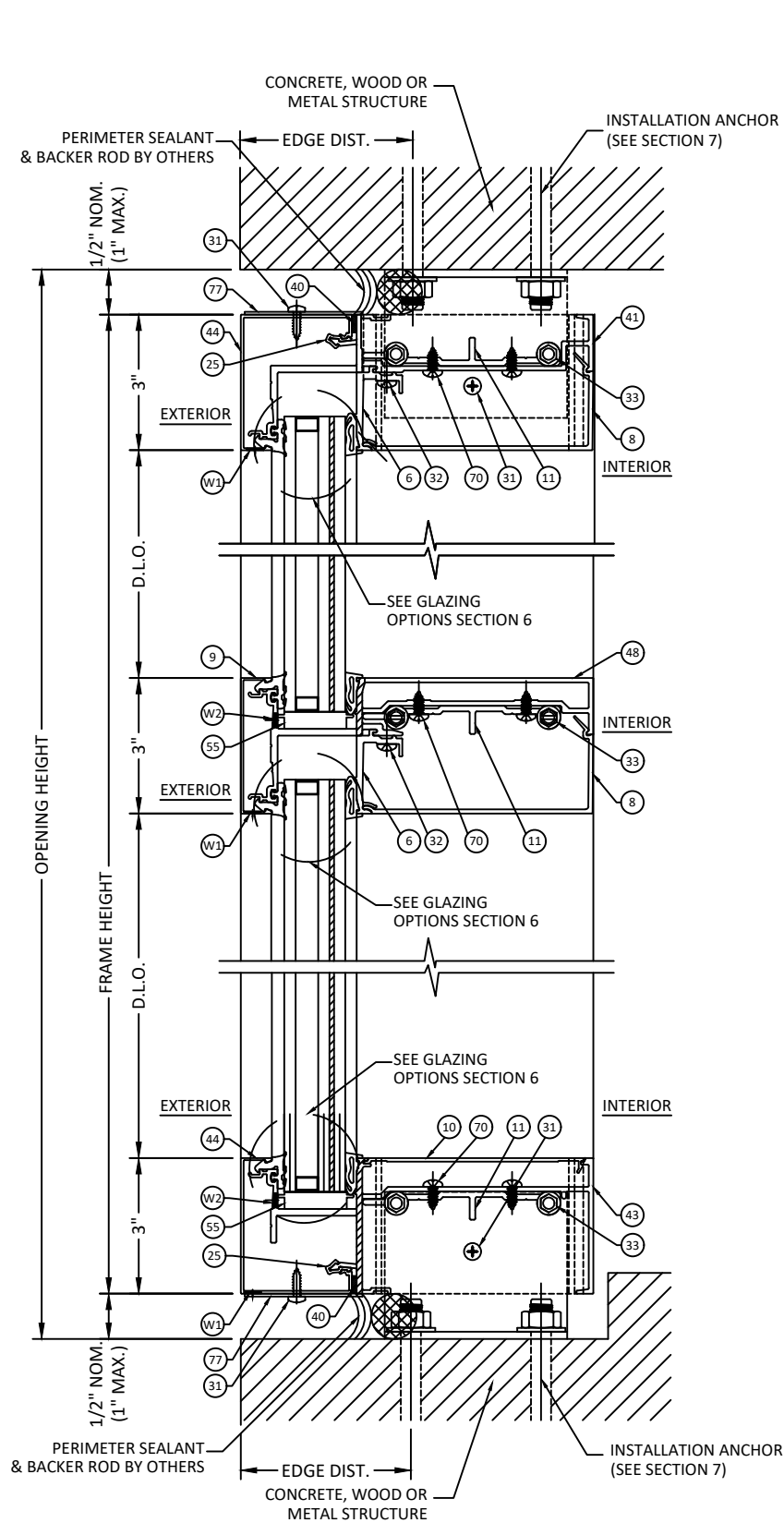


FL #:	FL14217
DATE:	07.31.17
DWG. BY:	AR/RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	YKK211
SECTION	3.1

3.1

c:\users\lucianosanchez\building drops, inc\building drops\projects\ykk ap america, inc\fbc-21-1229-1 - fbc submittal - revisions\dwgs\apc upload\014217\hvh\ykk 211 - fb14217 dwgs 1 thru 4 - cover, elev. vert & horz.dtl.dwg 6/2/2026 11:54 AM

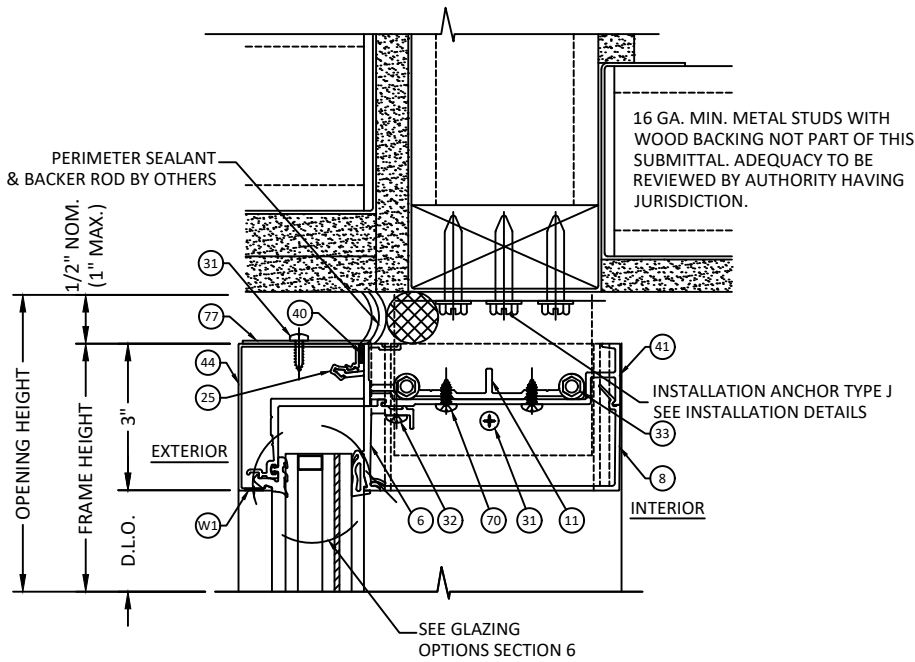
IG STANDARD MULLIONS - VERTICAL SECTIONS



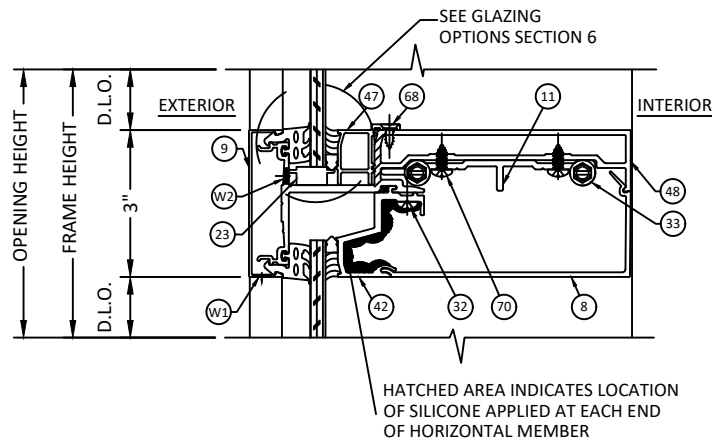
1
3.2 VERTICAL SECTION
IG STANDARD HORIZONTAL
INSULATING GLASS - DRY GLAZED

WEEPHOLES:
W1 = 5/16" DIA. WEEP HOLES TWO PER D.L. OPNG.
= AT 1/3 POINTS FROM VERTICALS
W2 = 5/16" DIA. WEEP HOLES THREE PER LITE
= AT 3" FROM VERTICALS AND CENTER OF D.L. OPNG.

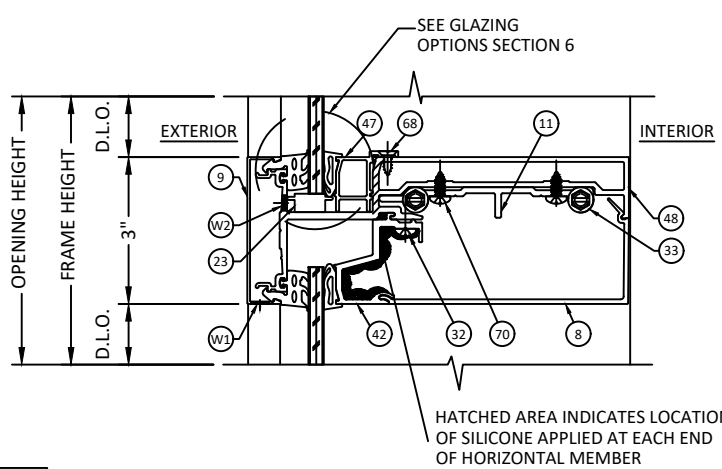
NOTE:
SOLID SHIM UP TO 1/4" MAY BE USED BETWEEN
ANCHOR & SUBSTRATE INCREASING THE CAULK
JOINT TO 1" ALLOWABLE UNDER THIS
CONDITION.



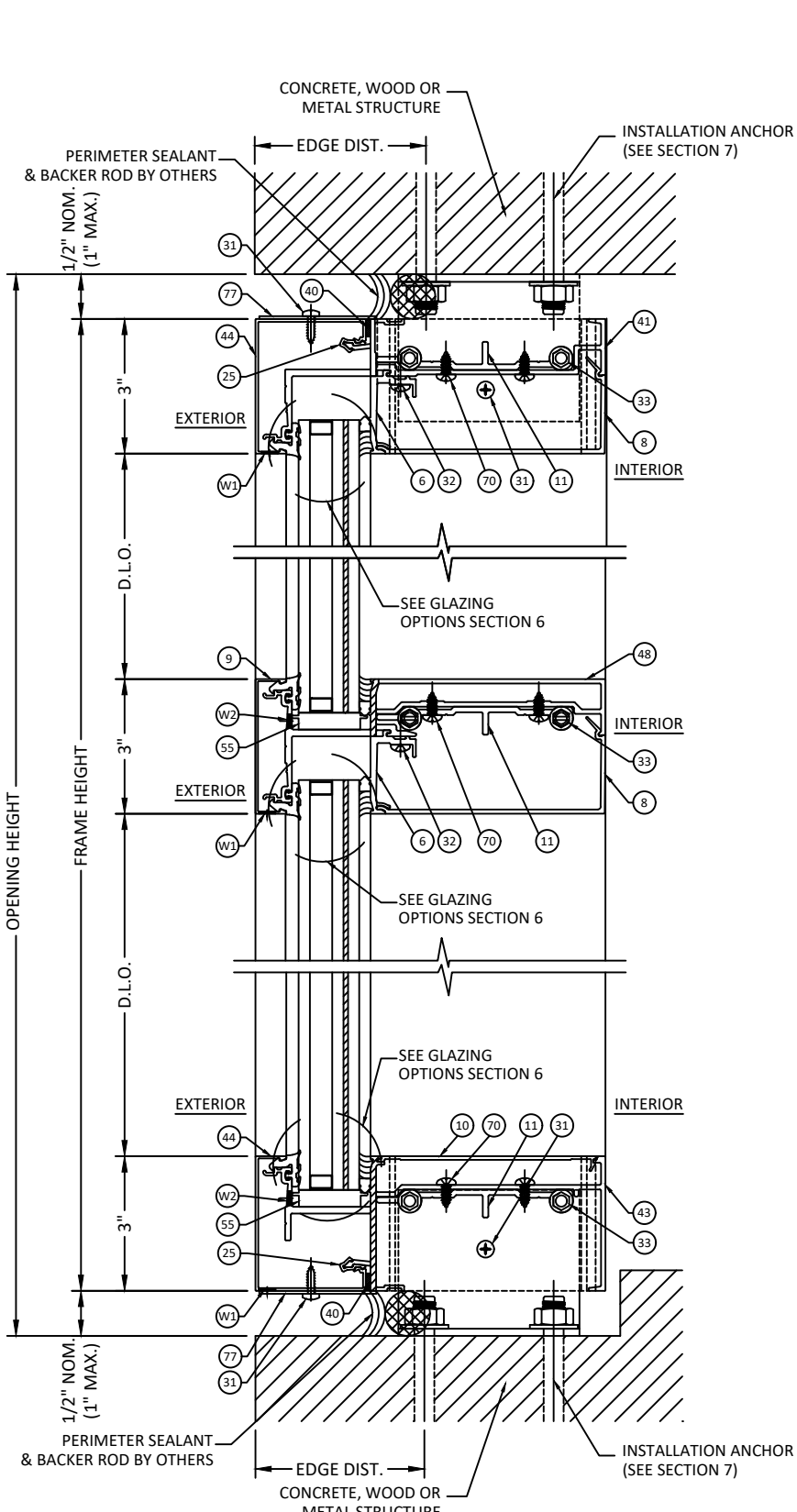
3
3.2 VERTICAL SECTION
SPECIAL ANCHOR DETAIL
IG STANDARD HORIZONTAL
INSULATING GLASS - DRY GLAZED



4
3.2 VERTICAL SECTION
IG STANDARD HORIZONTAL
5/16" COMPOSITE PANEL - WET GLAZED



5
3.2 VERTICAL SECTION
IG STANDARD HORIZONTAL
5/16" COMPOSITE PANEL - DRY GLAZED



2
3.2 VERTICAL SECTION
IG STANDARD HORIZONTAL
INSULATING GLASS - WET GLAZED



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

VERTICAL SECTIONS

PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC
AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC
SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE
FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC
DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

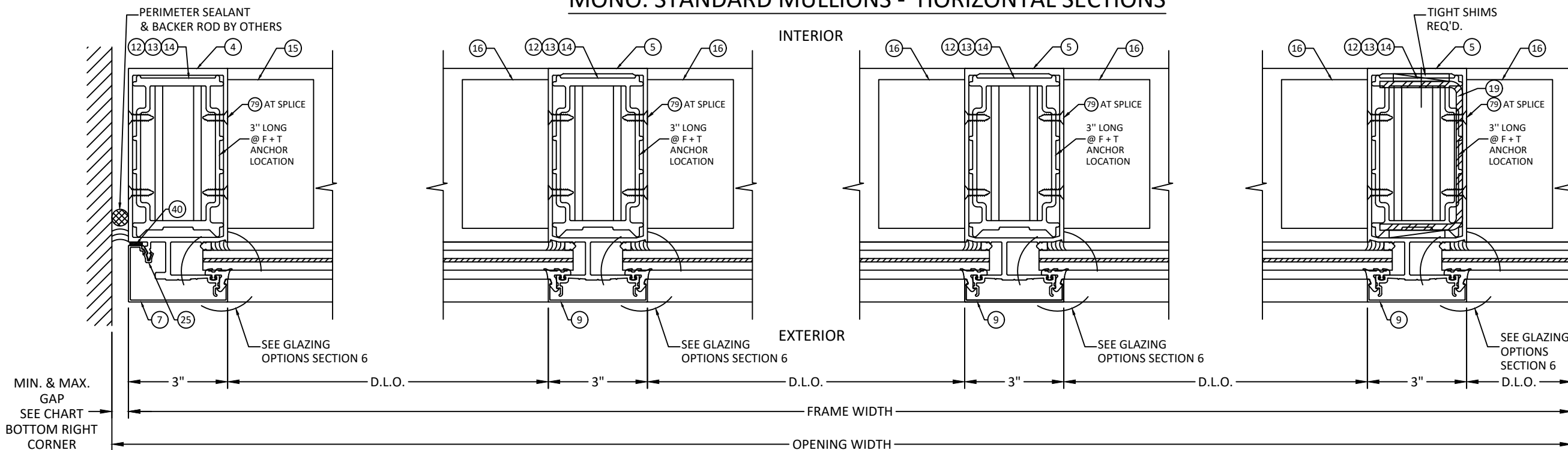
SCALE: **NTS**

DWG. #: **YKK211**

SECTION

3.2

MONO. STANDARD MULLIONS - HORIZONTAL SECTIONS



1 HORIZONTAL SECTION

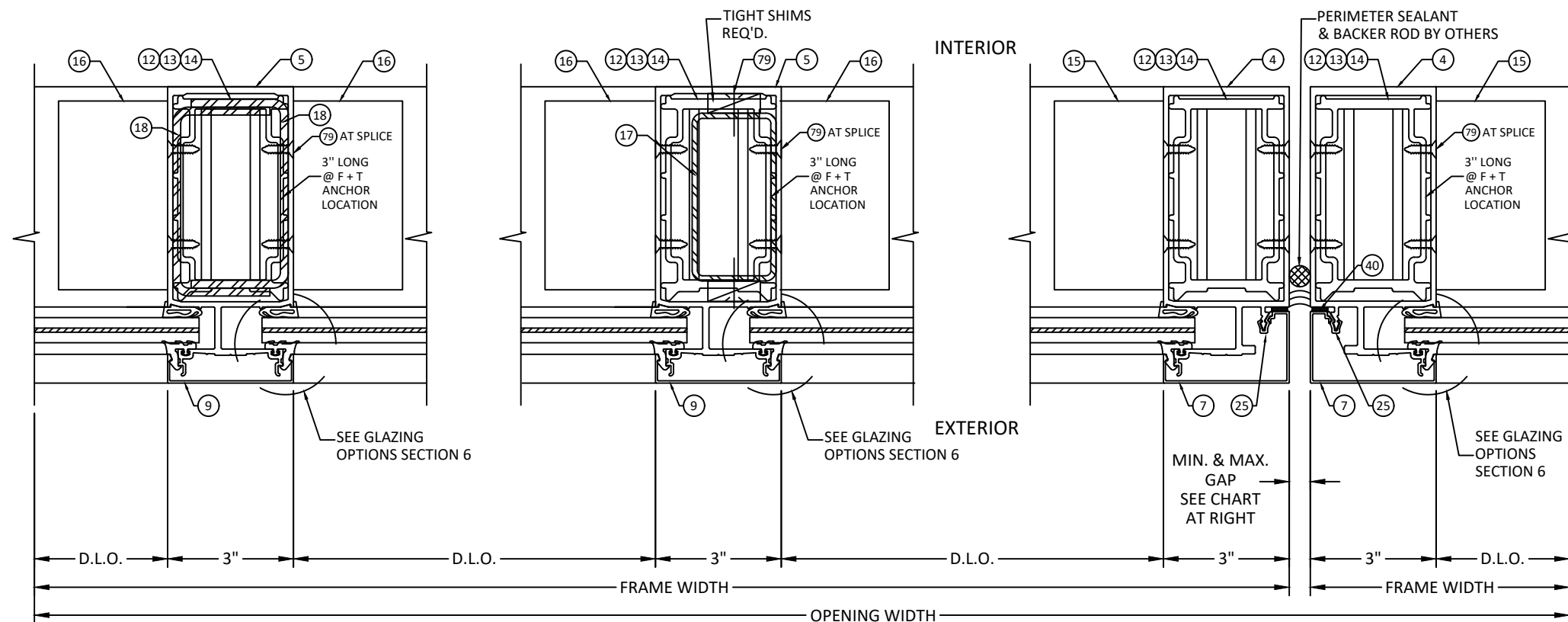
4.0 MONO. STANDARD MULLION
MONOLITHIC GLASS - WET GLAZED
F-ANCHOR

2 HORIZONTAL SECTION
4.0 MONO. STANDARD MULLION
MONOLITHIC GLASS - WET GLAZED
T-ANCHOR

3 HORIZONTAL SECTION

4.0 MONO. STANDARD MULLION
MONOLITHIC GLASS - WET GLAZED
T-ANCHOR

4.0 HORIZONTAL SECTION
MONO. STANDARD MULLION (REINFORCED)
MONOLITHIC GLASS - WET GLAZED
T-ANCHOR



5 HORIZONTAL SECTION
4.0 MONO. STANDARD MULLION (REINFORCED)
MONOLITHIC GLASS - DRY GLAZED
T-ANCHOR

6 HORIZONTAL SECTION
4.0 MONO. STANDARD MULLION (REINFORCED)
MONOLITHIC GLASS - DRY GLAZED
T-ANCHOR

7 HORIZONTAL SECTION
4.0 MONO. STANDARD DOUBLE JAMB
 MONOLITHIC GLASS - DRY GLAZED
 T-ANCHOR

MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
96"	1/2"	1"
120"	5/8"	1"
150"	3/4"	1"

MAX. FRAME WIDTH	MAX. GAP AT EACH SIDE
20 FT.	1/4"
30 FT.	3/8"
40 FT.	1/2"

NOTE:
JOINT AT JAMBS IS NON-STRUCTURAL AND SHALL BE SUFFICIENT
TO PROVIDE PROPER WEATHERPROOFING. SEALANT JOINT SIZE
MAY VARY IN ACCORDANCE WITH SEALANT MANUFACTURER'S
GUIDELINES AND RECOMMENDATION AND SHALL BE REVIEWED
BY THE AUTHORITY HAVING JURISDICTION.



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

HORIZONTAL SECTIONS

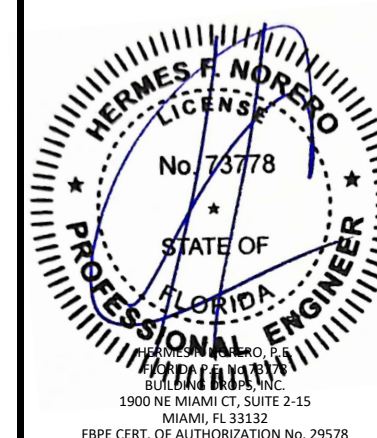
PREPARED BY: BUILDING DROPS, INC.

900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:

FL14217

DATE: 07.31.17

DWG. BY: AR/RV	CHK. BY: HFN
--------------------------	------------------------

SCALE: NTS

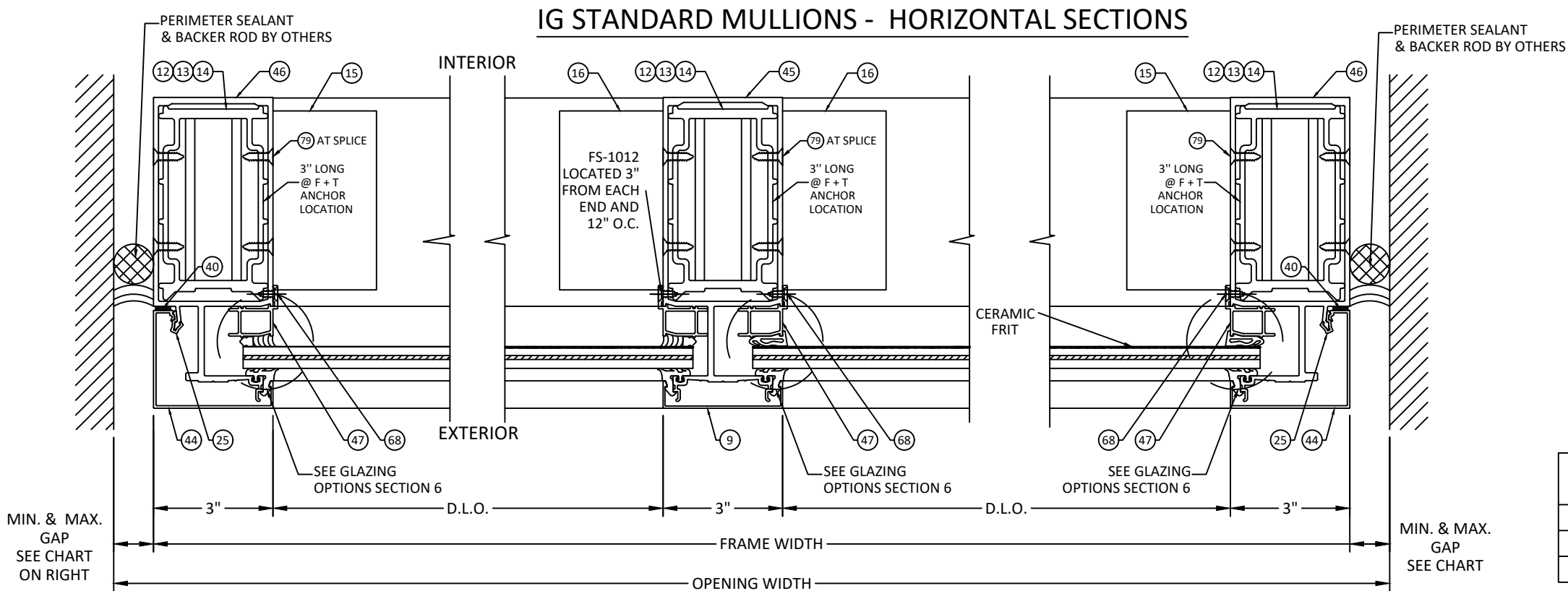
DWG. #: YKK211

SECTION

4.C

[Page 7 of 48]

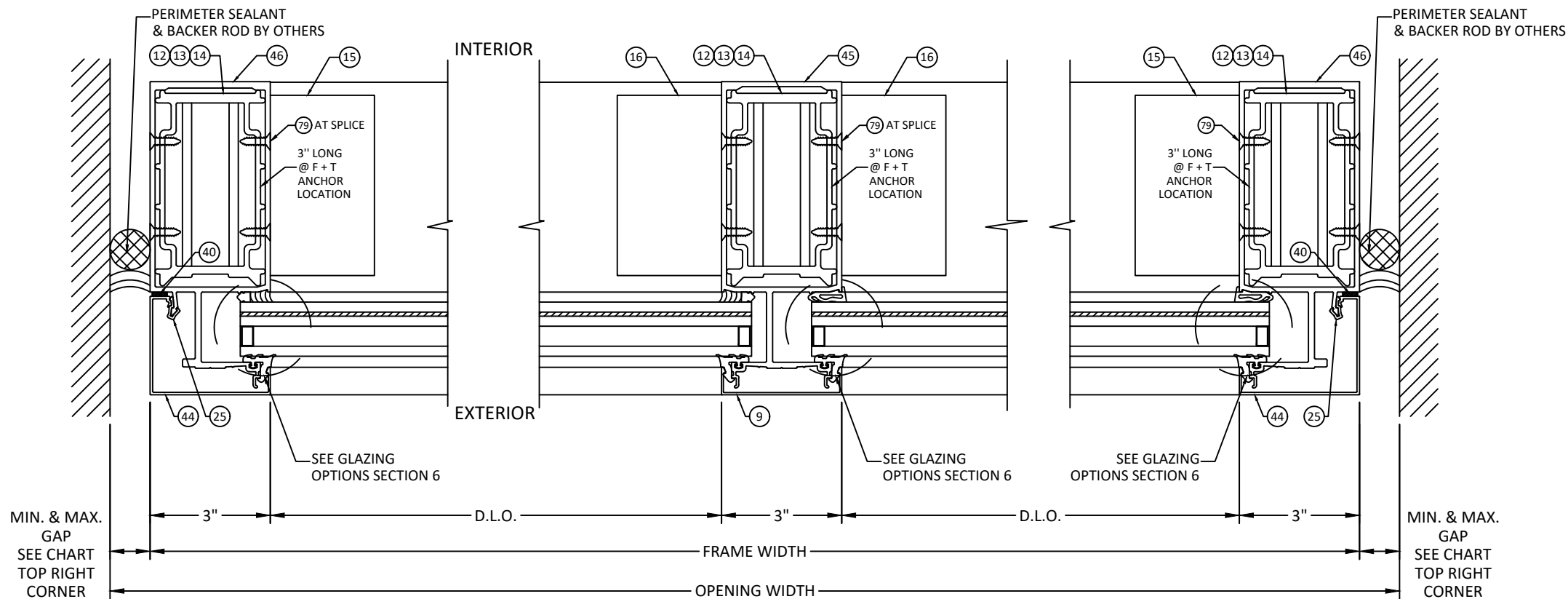
c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229\1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvhb\ykk 211 - fb14217.dwg 1 thru 4 - cover, elev, vert & horz dlt.dwg 6/2/2026 11:54 AM



1
4.1 HORIZONTAL SECTION
IG STANDARD MULLION
MONOLITHIC GLASS - WET GLAZED
F-ANCHOR

2
4.1 HORIZONTAL SECTION
IG STANDARD MULLION
MONOLITHIC GLASS - WET/DRY GLAZED
T-ANCHOR

3
4.1 HORIZONTAL SECTION
IG STANDARD MULLION
MONOLITHIC GLASS - DRY GLAZED
F-ANCHOR



4
4.1 HORIZONTAL SECTION
IG STANDARD MULLION
INSULATING GLASS - WET GLAZED
F-ANCHOR

5
4.1 HORIZONTAL SECTION
IG STANDARD MULLION
INSULATING GLASS - WET/DRY GLAZED
T-ANCHOR

6
4.1 HORIZONTAL SECTION
IG STANDARD MULLION
INSULATING GLASS - DRY GLAZED
F-ANCHOR



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVBZ) (IMPACT)

HORIZONTAL SECTIONS

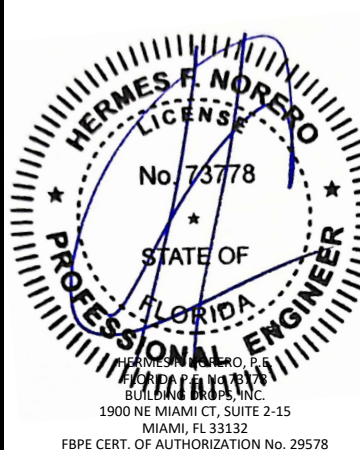
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

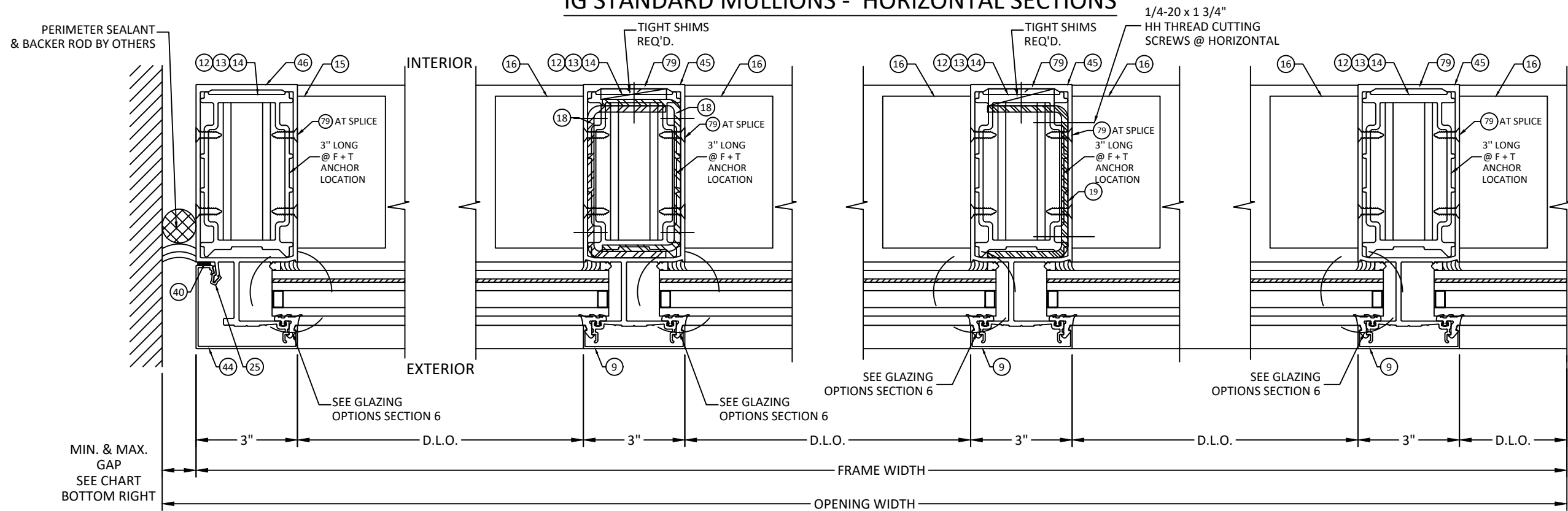
SCALE: **NTS**

DWG. #: **YKK211**

SECTION

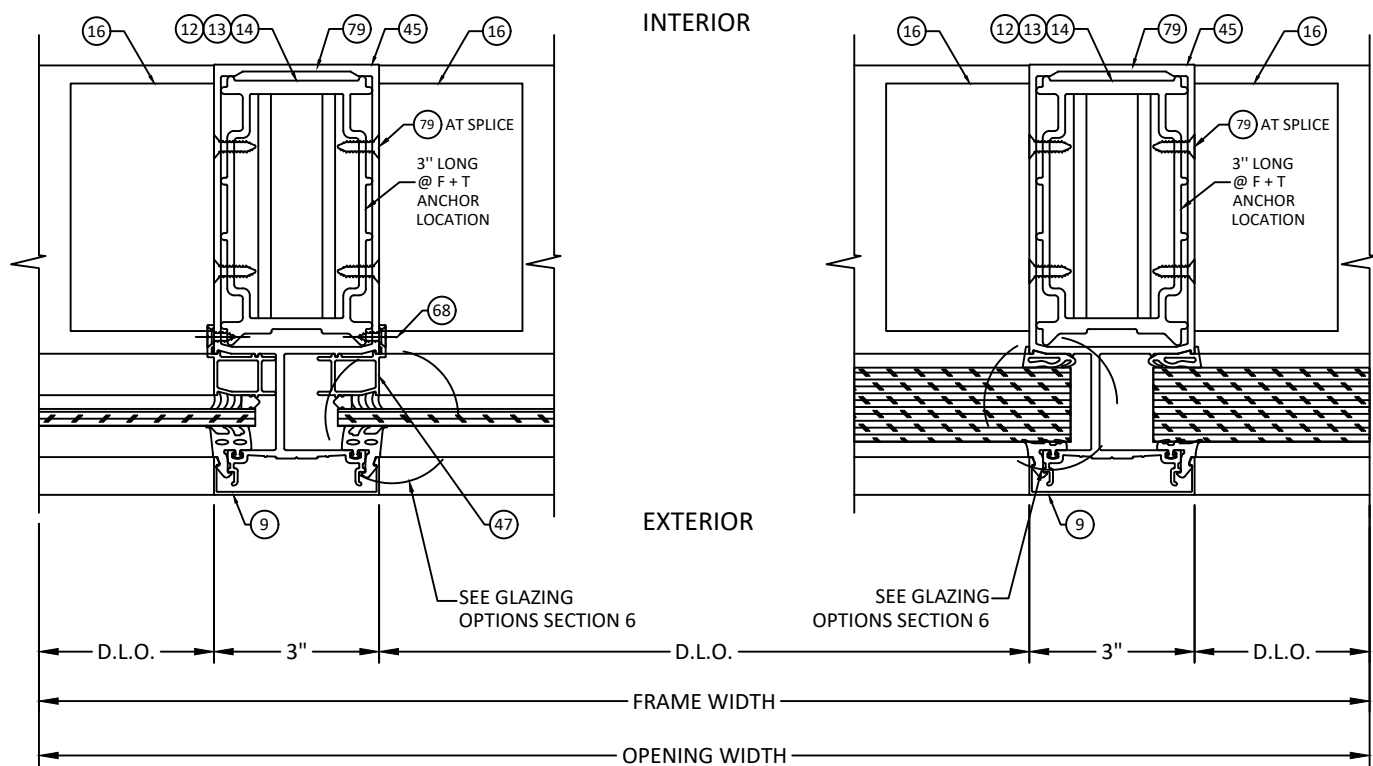
4.1

IG STANDARD MULLIONS - HORIZONTAL SECTIONS



1 HORIZONTAL SECTION

4.2 IG STANDARD MULLION INSULATING GLASS - WET GLAZED F-ANCHOR

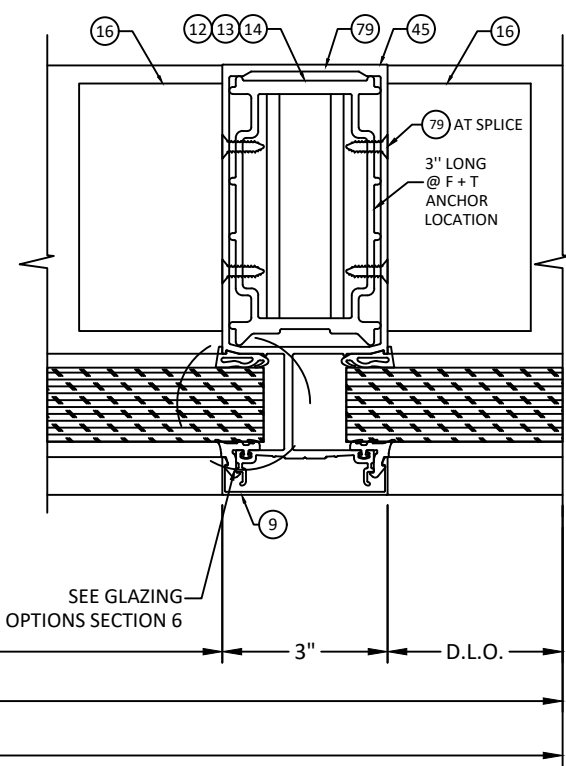


5 HORIZONTAL SECTION

4.2 IG STANDARD MULLION
5/16" METAL PANEL - WET GLAZED
T-ANCHOR

2 HORIZONTAL SECTION

4.2 IG STANDARD MULLION (REINFORCED) INSULATING GLASS - WET GLAZED T-ANCHOR



6 HORIZONTAL SECTION

4.2 IG STANDARD MULLION
1-5/16" METAL PANEL - DRY GLAZED
T-ANCHOR

3 HORIZONTAL SECTION

4.2 IG STANDARD MULLION (REINFORCED) INSULATING GLASS - WET GLAZED T-ANCHOR

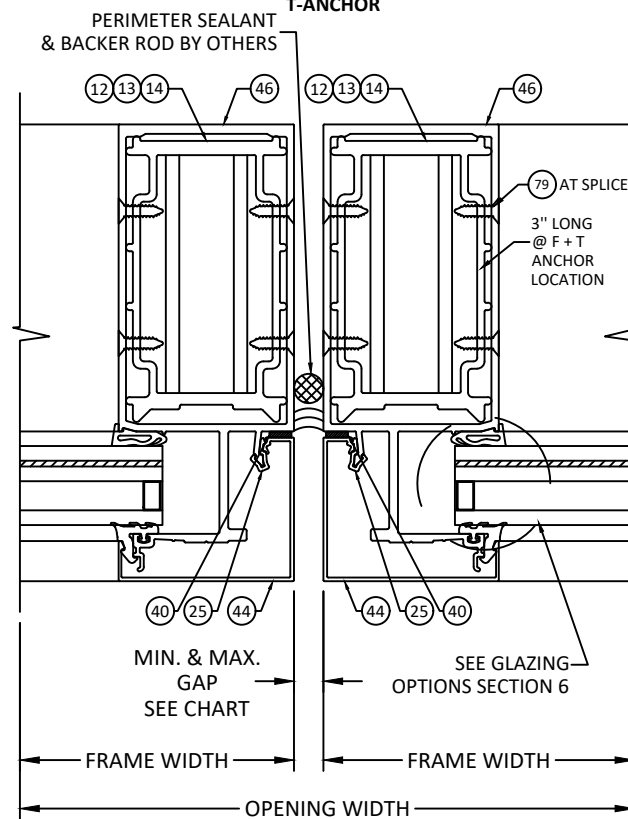
MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
96"	1/2"	1"
120"	5/8"	1"
150"	3/4"	1"

MAX. FRAME WIDTH	MAX. GAP AT EACH SIDE
20 FT.	1/4"
30 FT.	3/8"
40 FT.	1/2"

NOTE:
JOINT AT JAMBS IS NON-STRUCTURAL AND SHALL BE SUFFICIENT TO PROVIDE PROPER WEATHERPROOFING. SEALANT JOINT SIZE MAY VARY IN ACCORDANCE WITH SEALANT MANUFACTURER'S GUIDELINES AND RECOMMENDATION AND SHALL BE REVIEWED BY THE AUTHORITY HAVING JURISDICTION.

4 HORIZONTAL SECTION

4.2 IG STANDARD MULLION INSULATING GLASS - WET GLAZED T-ANCHOR



7 HORIZONTAL SECTION

4.2 IG STANDARD DOUBLE JAMB INSULATING GLASS - DRY GLAZED F-ANCHOR



YKK AP AMERICA, Inc.

1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

HORIZONTAL SECTIONS

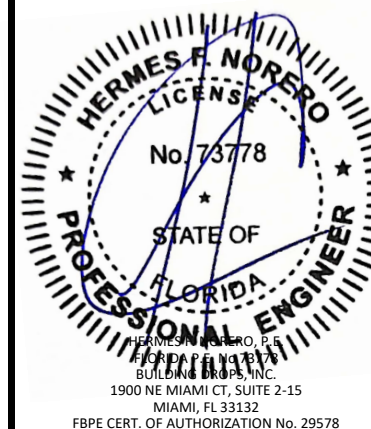
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:

FL14217

DATE: 07.31.17

DWG. BY: AR/RV	CHK. BY: HFN
--------------------------	------------------------

SCALE: NTS

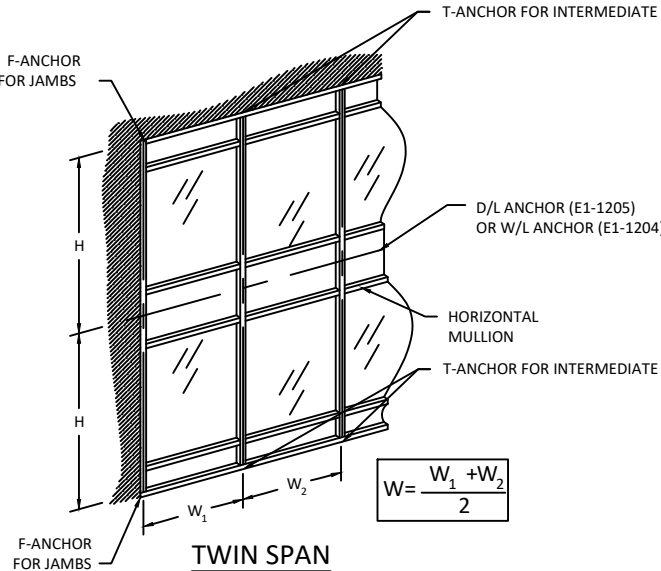
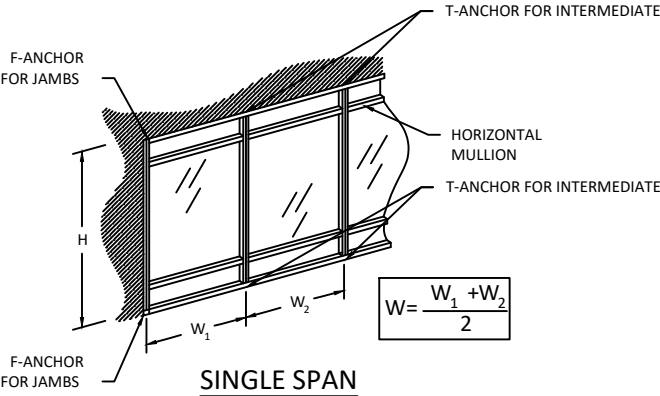
DWG. #: YKK211

SECTION

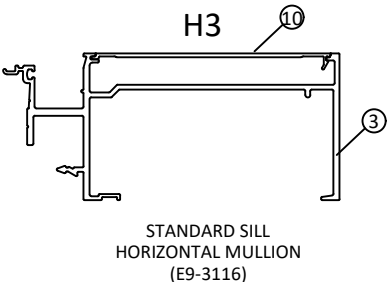
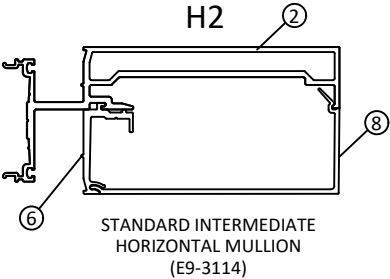
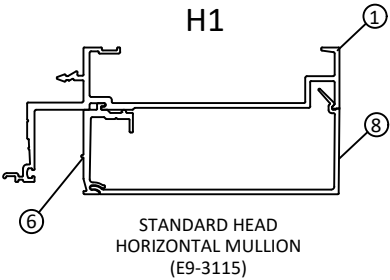
4.2

MULLION (MONOLITHIC) CAPACITY CHARTS

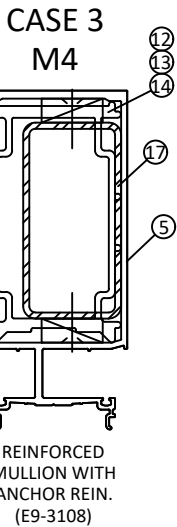
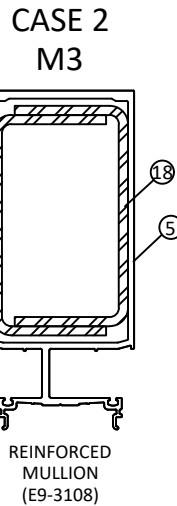
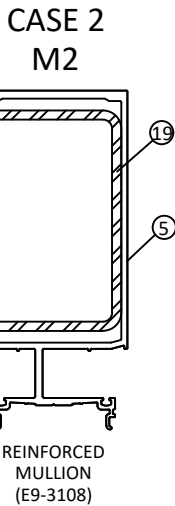
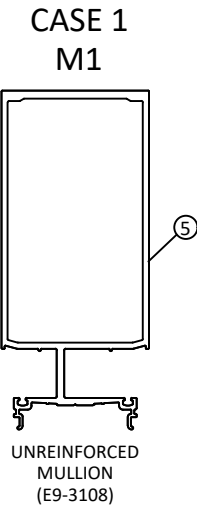
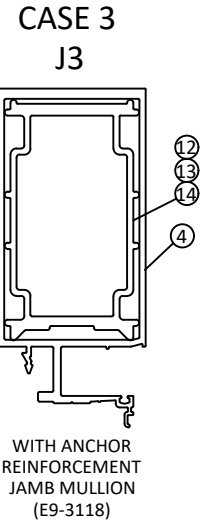
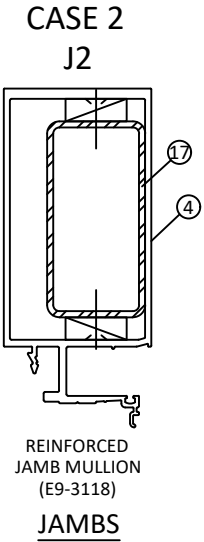
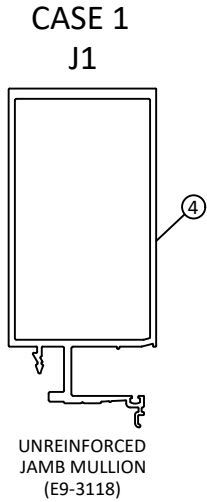
- NOTES:
- 1. DESIGN PRESSURES ARE LIMITED BY THE MULLION FIBERSTRESS AND DEFLECTION CAPACITY PER FBC CURRENT SPECIFICATIONS FOR HVHZ.
 - 2. SELECT DESIGN PRESSURE AND PANEL WIDTH (W) AND OBTAIN THE MAXIMUM ALLOWABLE DESIGN PRESSURE FOR MULLION.
 - 3. FOR HORIZONTAL MULLIONS CAPACITY, SEE HORIZONTAL MULLION CHART.
 - 4. WHEN PANEL WIDTHS ARE NOT EQUAL, USE THE AVERAGE WIDTH ON THE CHART.



- NOTES:
- 1. CHART BASED ON TWO SETTING BLOCKS (E2-0623) PLACED AT 1/4 SPAN LENGTH.
 - 2. CALCULATED FOR MAX. 12-FT DLO ABOVE HORIZONTAL (DO NOT EXCEED MAX. DLO DIMENSIONS IN GLASS CHARTS FOR GLASS TYPE).



HORIZONTAL MULLIONS (+/- PSF)	
SPAN WIDTH, 'W' (IN.)	EXT. (+) INT. (-)
72	130



MULLIONS

- 12 MULLION SPLICE SLEEVE (6" LONG @ SPLICE)
- 13 MULLION ANCHOR SLEEVE (3" LONG @ TOP & BOTTOM)
- 14 MULLION WL/DL REINF. SLEEVE (29" LONG @ ANCHOR)

- CASE 1: SINGLE SPAN WITH UNREINFORCED MULLION
CASE 2: SINGLE SPAN WITH REINFORCED MULLION FULL HEIGHT
CASE 3: TWIN SPAN WITH OR WITHOUT STEEL REINFORCED MULLION (ANCHOR SLEEVE AT INTERMEDIATE SUPPORT ONLY)

STEEL REINFORCING LENGTH = FRAME HEIGHT - 12 IN.



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

MULLION CAPACITY CHART

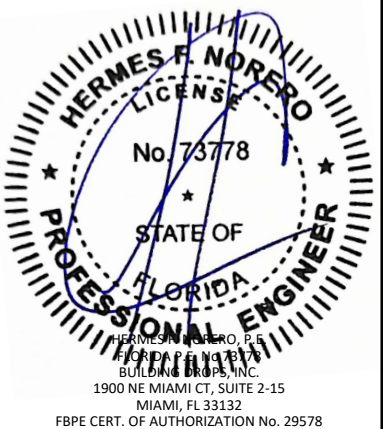
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: 07.31.17

DWG. BY: AR/RV
CHK. BY: HFN

SCALE: NTS

DWG. #: YKK211

SECTION

4.3

MULLION (MONOLITHIC) CAPACITY CHARTS

JAMB/MULLION (MONOLITHIC) LOAD CAPACITY (+/- PSF) WITH OR WITHOUT INTERMEDIATE HORIZONTALS							
NOMINAL DIMS.		CASE 1		CASE 2			CASE 3
		JAMB 'J1'	MULLION 'M1'	JAMB 'J2'	MULLION 'M2'	MULLION 'M3'	JAMB 'J3' MULLION 'M4'
TRIB. WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
42	78	130.0	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0
51		130.0	130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0	130.0
57		130.0	130.0	130.0	130.0	130.0	130.0
60		130.0	130.0	130.0	130.0	130.0	130.0
63		130.0	130.0	130.0	130.0	130.0	130.0
66		130.0	130.0	130.0	130.0	130.0	130.0
69		130.0	130.0	130.0	130.0	130.0	130.0
72		130.0	130.0	130.0	130.0	130.0	130.0
42	84	130.0	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0
51		130.0	130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0	130.0
57		130.0	130.0	130.0	130.0	130.0	130.0
60		130.0	130.0	130.0	130.0	130.0	130.0
63		130.0	130.0	130.0	130.0	130.0	130.0
66		130.0	130.0	130.0	130.0	130.0	130.0
69		130.0	130.0	130.0	130.0	130.0	130.0
72		130.0	-	130.0	130.0	130.0	130.0
42	90	130.0	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0
51		130.0	130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0	130.0
57		130.0	130.0	130.0	130.0	130.0	130.0
60		130.0	130.0	130.0	130.0	130.0	130.0
63		130.0	130.0	130.0	130.0	130.0	130.0
66		130.0	130.0	130.0	130.0	130.0	130.0
69		130.0	-	130.0	130.0	130.0	130.0
72		125.0	-	130.0	125.0	130.0	130.0
42	96	130.0	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0
51		130.0	130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0	130.0
57		130.0	130.0	130.0	130.0	130.0	130.0
60		130.0	130.0	130.0	130.0	130.0	130.0
63		130.0	-	130.0	130.0	130.0	130.0
66		127.8	-	130.0	127.8	130.0	130.0
69		122.3	-	130.0	122.3	130.0	130.0
72		117.2	-	130.0	117.2	130.0	130.0
42	100.5	130.0	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0
51		130.0	130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0	130.0
57		130.0	130.0	130.0	130.0	130.0	130.0
60		130.0	130.0	130.0	130.0	130.0	130.0
63		127.9	-	130.0	127.9	130.0	130.0
66		122.1	-	130.0	122.1	130.0	130.0
69		116.8	-	130.0	116.8	130.0	130.0
72		111.9	-	130.0	111.9	130.0	130.0

JAMB/MULLION (MONO.) LOAD CAPACITY(+/- PSF) WITH OR WITHOUT INTERMEDIATE HORIZONTALS						
NOMINAL DIMS.		CASE 1	CASE 2		CASE 3	
		JAMB 'J1'	JAMB 'J2'	MULLION 'M2'	MULLION 'M3'	JAMB 'J3' MULLION 'M4'
TRIB. WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
42	102	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0
51		130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0
57		130.0	130.0	130.0	130.0	130.0
60		130.0	130.0	130.0	130.0	130.0
63		126.1	130.0	126.1	130.0	130.0
66		120.3	130.0	120.3	130.0	130.0
69		115.1	130.0	115.1	130.0	130.0
72		110.3	130.0	110.3	130.0	130.0
42	108	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0
51		130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0
57		130.0	130.0	130.0	130.0	130.0
60		125.0	130.0	125.0	130.0	130.0
63		119.0	130.0	119.0	130.0	130.0
66		113.6	130.0	113.6	130.0	130.0
69		108.7	130.0	108.7	130.0	130.0
72		104.2	130.0	104.2	130.0	130.0
42	114	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0
51		130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0
57		124.7	130.0	124.7	130.0	130.0
60		118.4	130.0	118.4	130.0	130.0
63		112.8	130.0	112.8	130.0	130.0
66		107.7	130.0	107.7	130.0	130.0
69		103.0	130.0	103.0	130.0	130.0
72		98.7	130.0	98.7	130.0	130.0
42	120	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0
51		130.0	130.0	130.0	130.0	130.0
54		125.0	130.0	125.0	130.0	130.0
57		118.4	130.0	118.4	130.0	130.0
60		112.5	130.0	112.5	130.0	130.0
63		107.1	130.0	107.1	130.0	130.0
66		102.3	130.0	102.3	130.0	130.0
69		97.8	130.0	97.8	130.0	130.0
72		93.8	130.0	93.8	130.0	130.0

JAMB/MULLION (MONO.) LOAD CAPACITY(+/- PSF) WITH OR WITHOUT INTERMEDIATE HORIZONTALS						
NOMINAL DIMS.		CASE 1	CASE 2		CASE 3	
		JAMB 'J1'	JAMB 'J2'	MULLION 'M2'	MULLION 'M3'	JAMB 'J3' MULLION 'M4'
TRIB. WIDTH (W)	FRAME HEIGHT	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
42	126	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0
51		126.1	130.0	126.1	130.0	130.0
54		119.0	130.0	119.0	130.0	130.0
57		112.8	130.0	112.8	130.0	130.0
60		107.1	130.0	107.1	130.0	130.0
63		102.0	130.0	102.0	130.0	130.0
66		97.4	130.0	97.4	130.0	130.0
69		93.2	130.0	93.2	130.0	130.0
42	132	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0
48		127.8	130.0	127.8	130.0	130.0
51		120.3	130.0	120.3	130.0	130.0
54		113.6	130.0	113.6	130.0	130.0
57		107.7	130.0	107.7	130.0	130.0
60		102.3	130.0	102.3	130.0	130.0
63		97.4	130.0	97.4	130.0	130.0
66		93.0	130.0	93.0	130.0	130.0
42	138	130.0	130.0	130.0	130.0	130.0
45		130.0	130.0	130.0	130.0	130.0
48		122.3	130.0	122.3	130.0	130.0
51		115.1	130.0	115.1	130.0	130.0
54		108.7	130.0	108.7	130.0	130.0
57		103.0	130.0	103.0	130.0	130.0
60		97.8	130.0	97.8	130.0	130.0
63		93.2	130.0	93.2	127.5	130.0
42	144	130.0	130.0	130.0	130.0	130.0
45		125.0	130.0	125.0	130.0	130.0
48		117.2	130.0	117.2	130.0	130.0
51		110.3	130.0	110.3	130.0	130.0
54		104.2	130.0	104.2	130.0	130.0
57		98.7	130.0	98.7	129.4	130.0
60		93.8	130.0	93.8	122.9	130.0
42	150	128.6	130.0	128.6	130.0	130.0
45		120.0	130.0	120.0	130.0	130.0
48		112.5	130.0	112.5	130.0	130.0
51		105.9	130.0	105.9	130.0	130.0
54		100.0	130.0	100.0	125.9	130.0
57		94.7	130.0	94.7	119.3	130.0
60		90.0	130.0	90.0	113.3	130.0

YKK

ap

Quality
inspires™

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

MULLION CAPACITY CHART

PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO

LICENSE

No. 73778

STATE OF FLORIDA

PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL14217

DATE:

07.31.17

DWG. BY:

AR/RV

CHK. BY:

HFN

SCALE:

NTS

DWG. #:

YKK211

SECTION

4.3A

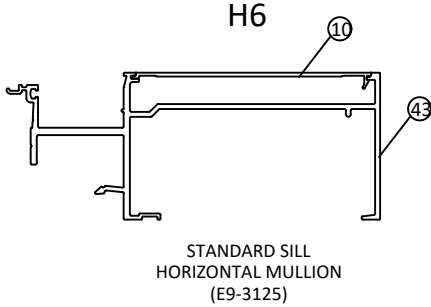
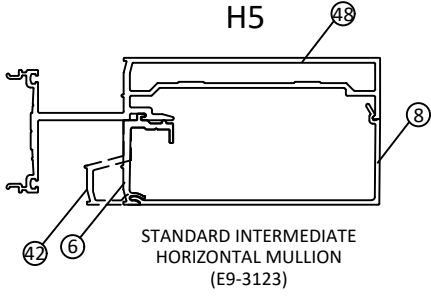
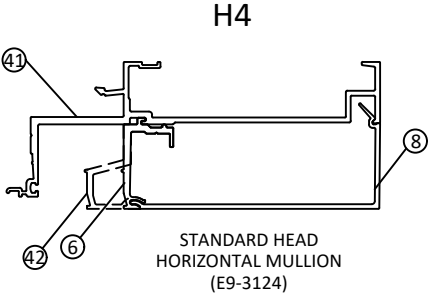
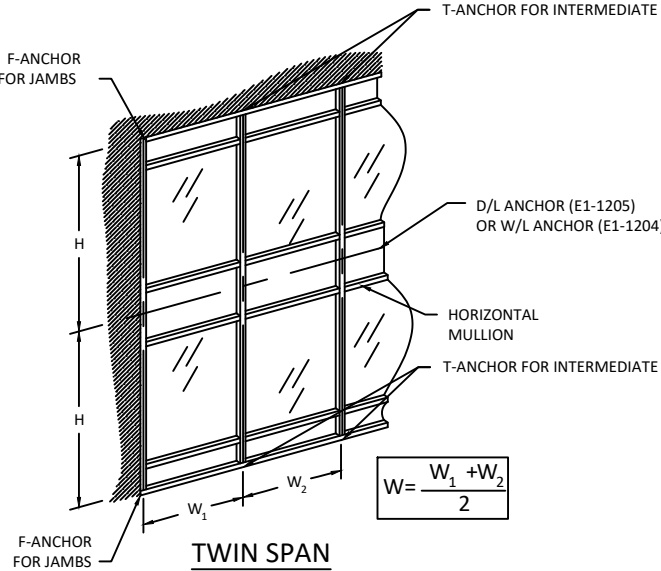
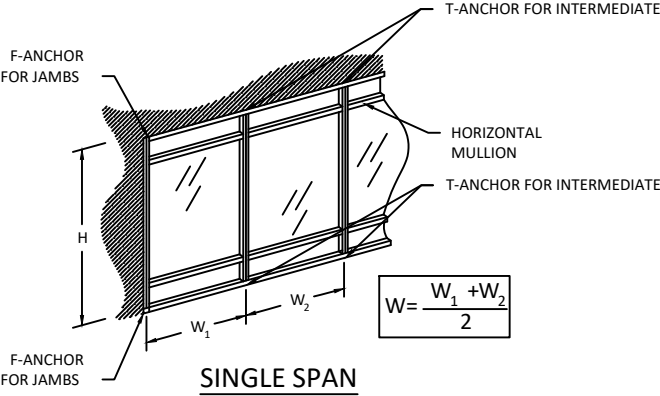
[Page 11 of 48]

c:\users\lucianosanchez\building drops - documents\common\projects\ykk ap america, inc

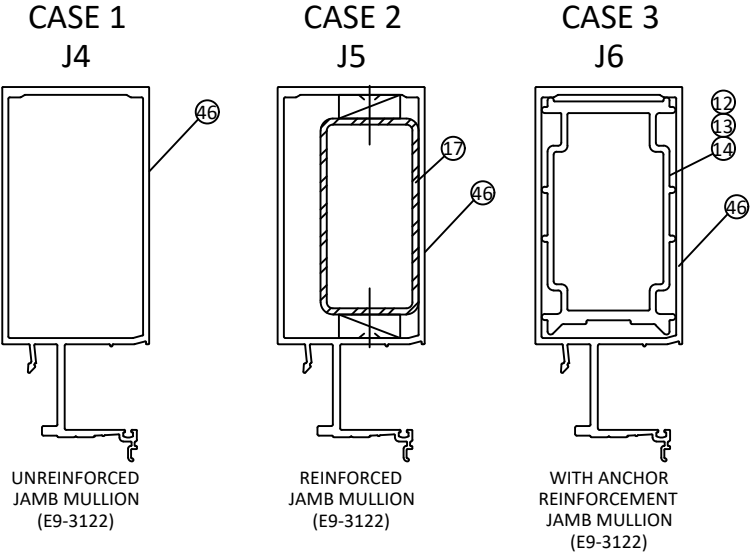
MULLION (INSULATED) CAPACITY CHARTS

- NOTES:
- 1. DESIGN PRESSURES ARE LIMITED BY THE MULLION FIBERSTRESS AND DEFLECTION CAPACITY PER FBC CURRENT SPECIFICATIONS FOR HVHZ.
 - 2. SELECT DESIGN PRESSURE AND PANEL WIDTH (W) AND OBTAIN THE MAXIMUM ALLOWABLE DESIGN PRESSURE FOR MULLION.
 - 3. FOR HORIZONTAL MULLIONS CAPACITY, SEE HORIZONTAL MULLION CHART.
 - 4. WHEN PANEL WIDTHS ARE NOT EQUAL, USE THE AVERAGE WIDTH ON THE CHART.

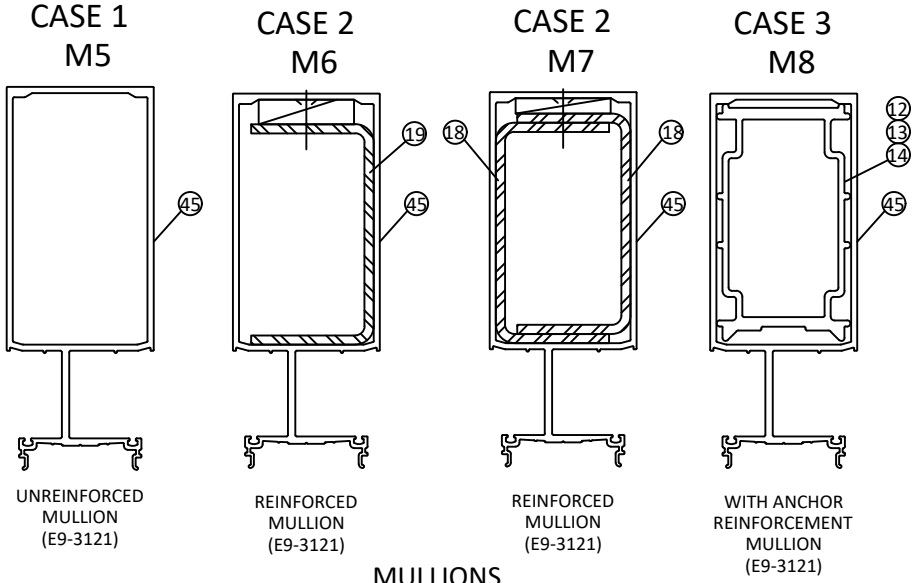
- NOTES:
- 1. CHART BASED ON TWO SETTING BLOCKS (E2-0623) PLACED AT 1/4 SPAN LENGTH.
 - 2. CALCULATED FOR MAX. 12-FT DLO ABOVE HORIZONTAL (DO NOT EXCEED MAX. DLO DIMENSIONS IN GLASS CHARTS FOR GLASS TYPE).



HORIZONTAL MULLIONS (+/- PSF)	
SPAN WIDTH, 'W' (IN.)	EXT. (+) INT. (-)
72	120



JAMBS



MULLIONS

- 12 MULLION SPLICE SLEEVE (6" LONG @ SPLICE)
- 13 MULLION ANCHOR SLEEVE (3" LONG @ TOP & BOTTOM)
- 14 MULLION WL/DL REINF. SLEEVE (29" LONG @ ANCHOR)

CASE 1: SINGLE SPAN WITH UNREINFORCED MULLION
CASE 2: SINGLE SPAN WITH REINFORCED MULLION FULL HEIGHT
CASE 3: TWIN SPAN WITH ANCHOR SLEEVE AT INTERMEDIATE SUPPORT ONLY

STEEL REINFORCING LENGTH = FRAME HEIGHT - 12 IN.

YKK
ap

Quality
inspires™

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

MULLION CAPACITY CHART

PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

BD
BUILDING DROPS

REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
FL14217

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **YKK211**

SECTION
4.4
[Page 12 of 48]

MULLION (INSULATED) CAPACITY CHARTS

JAMB/MULLION (INSULATED) LOAD CAPACITY (+/- PSF) WITH OR WITHOUT INTERMEDIATE HORIZONTALS								
NOMINAL DIMS.		CASE 1		CASE 2		CASE 3		
		JAMB 'J4'	MULLION 'M5'	MULLION 'M6'	JAMB 'J5' MULLION 'M7'	JAMB 'J6' MULLION 'M8'		
TRIB. WIDTH (W)	FRAME HEIGHT	EXT. (+)	INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
42	84	120.0	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0	120.0
48		120.0	120.0	120.0	120.0	120.0	120.0	120.0
51		120.0	120.0	120.0	120.0	120.0	120.0	120.0
54		120.0	120.0	120.0	120.0	120.0	120.0	120.0
57		120.0	120.0	120.0	120.0	120.0	120.0	120.0
60		120.0	120.0	120.0	120.0	120.0	120.0	120.0
63		120.0	120.0	120.0	120.0	120.0	120.0	120.0
66		120.0	120.0	120.0	120.0	120.0	120.0	120.0
69		120.0	120.0	120.0	120.0	120.0	120.0	120.0
72		120.0	120.0	120.0	120.0	120.0	120.0	120.0
42	90	120.0	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0	120.0
48		120.0	120.0	120.0	120.0	120.0	120.0	120.0
51		120.0	120.0	120.0	120.0	120.0	120.0	120.0
54		120.0	120.0	120.0	120.0	120.0	120.0	120.0
57		120.0	120.0	120.0	120.0	120.0	120.0	120.0
60		120.0	120.0	120.0	120.0	120.0	120.0	120.0
63		120.0	120.0	120.0	120.0	120.0	120.0	120.0
66		120.0	120.0	120.0	120.0	120.0	120.0	120.0
69		120.0	120.0	120.0	120.0	120.0	120.0	120.0
72		120.0	120.0	120.0	120.0	120.0	120.0	120.0
42	96	120.0	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0	120.0
48		120.0	120.0	120.0	120.0	120.0	120.0	120.0
51		120.0	120.0	120.0	120.0	120.0	120.0	120.0
54		120.0	120.0	120.0	120.0	120.0	120.0	120.0
57		120.0	120.0	120.0	120.0	120.0	120.0	120.0
60		120.0	120.0	120.0	120.0	120.0	120.0	120.0
63		120.0	120.0	120.0	120.0	120.0	120.0	120.0
66		120.0	120.0	120.0	120.0	120.0	120.0	120.0
69		120.0	120.0	120.0	120.0	120.0	120.0	120.0
72		112.0	117.2	-	112.0	117.2	120.0	120.0

JAMB/MULLION (INSULATED) LOAD CAPACITY (+/- PSF) WITH OR WITHOUT INTERMEDIATE HORIZONTALS								
NOMINAL DIMS.		CASE 1		CASE 2		CASE 3		
		JAMB 'J4'	MULLION 'M5'	MULLION 'M6'	JAMB 'J5' MULLION 'M7'	JAMB 'J6' MULLION 'M8'		
TRIB. WIDTH (W)	FRAME HEIGHT	EXT. (+)	INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
42	102	120.0	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0	120.0
48		120.0	120.0	120.0	120.0	120.0	120.0	120.0
51		120.0	120.0	120.0	120.0	120.0	120.0	120.0
54		120.0	120.0	120.0	120.0	120.0	120.0	120.0
57		120.0	120.0	120.0	120.0	120.0	120.0	120.0
60		120.0	120.0	120.0	120.0	120.0	120.0	120.0
63		120.0	120.0	120.0	120.0	120.0	120.0	120.0
66		120.0	120.0	120.0	120.0	120.0	120.0	120.0
69		110.0	115.1	-	110.0	115.1	120.0	120.0
72		105.4	110.3	-	105.4	110.3	120.0	120.0
42	108	120.0	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0	120.0
48		120.0	120.0	120.0	120.0	120.0	120.0	120.0
51		120.0	120.0	120.0	120.0	120.0	120.0	120.0
54		120.0	120.0	120.0	120.0	120.0	120.0	120.0
57		120.0	120.0	120.0	120.0	120.0	120.0	120.0
60		120.0	120.0	120.0	120.0	120.0	120.0	120.0
63		120.0	120.0	120.0	120.0	120.0	120.0	120.0
66		108.6	113.6	-	108.6	113.6	120.0	120.0
69		103.9	108.7	-	103.9	108.7	120.0	120.0
72		99.5	104.2	-	99.5	104.2	120.0	120.0
42	114	120.0	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0	120.0
48		120.0	120.0	120.0	120.0	120.0	120.0	120.0
51		120.0	120.0	120.0	120.0	120.0	120.0	120.0
54		120.0	120.0	120.0	120.0	120.0	120.0	120.0
57		120.0	120.0	120.0	120.0	120.0	120.0	120.0
60		120.0	120.0	120.0	120.0	120.0	120.0	120.0
63		107.8	112.8	-	107.8	112.8	120.0	120.0
66		102.9	107.7	-	102.9	107.7	120.0	120.0
69		98.4	103.0	-	98.4	103.0	120.0	120.0
72		94.3	98.7	-	94.3	98.7	120.0	120.0

JAMB/MULLION (INSULATED) LOAD CAPACITY (+/- PSF) WITH OR WITHOUT INTERMEDIATE HORIZONTALS							
NOMINAL DIMS.		CASE 1		CASE 2		CASE 3	
		JAMB 'J4'	MULLION 'M6'	JAMB 'J5' MULLION 'M7'	JAMB 'J6' MULLION 'M8'		
TRIB. WIDTH (W)	FRAME HEIGHT	EXT. (+)	INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
42	120	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0
48		120.0	120.0	120.0	120.0	120.0	120.0
51		120.0	120.0	120.0	120.0	120.0	120.0
54		119.4	120.0	119.4	120.0	120.0	120.0
57		113.2	118.4	113.2	118.4	120.0	120.0
60		107.5	112.5	107.5	112.5	120.0	120.0
63		102.4	107.1	102.4	107.1	120.0	120.0
66		97.7	102.3	97.7	102.3	120.0	120.0
69		93.5	97.8	93.5	97.8	120.0	120.0
72		89.6	93.8	89.6	93.8	120.0	120.0
42	126	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0
48		120.0	120.0	120.0	120.0	120.0	120.0
51		120.0	120.0	120.0	120.0	120.0	120.0
54		113.8	119.0	113.8	119.0	120.0	120.0
57		107.8	112.8	107.8	112.8	120.0	120.0
60		102.4	107.1	102.4	107.1	120.0	120.0
63		97.5	102.0	97.5	102.0	120.0	120.0
66		93.1	97.4	93.1	97.4	120.0	120.0
69		89.0	93.2	89.0	93.2	120.0	120.0
72		120.0	120.0	120.0	120.0	120.0	120.0
42	132	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0
48		120.0	120.0	120.0	120.0	120.0	120.0
51		115.0	120.0	115.0	120.0	120.0	120.0
54		108.6	113.6	108.6	113.6	120.0	120.0
57		102.9	107.7	102.9	107.7	120.0	120.0
60		97.7	102.3	97.7	102.3	120.0	120.0
63		93.1	97.4	93.1	97.4	120.0	120.0
66		88.8	93.0	88.8	93.0	120.0	120.0
69		120.0	120.0	120.0	120.0	120.0	120.0
72		120.0	120.0	120.0	120.0	120.0	120.0
42	138	120.0	120.0	120.0	120.0	120.0	120.0
45		120.0	120.0	120.0	120.0	120.0	120.0
48		116.8	120.0	116.8	120.0	120.0	120.0
51		110.0	115.1	110.0	115.1	120.0	120.0
54		103.9	108.7	103.9	108.7	120.0	120.0
57		98.4	103.0	98.4	103.0	120.0	120.0
60		93.5	97.8	93.5	97.8	120.0	120.0
63		89.0	93.2	89.0	93.2	120.0	120.0
66		120.0	120.0	120.0	120.0	120.0	120.0
69		119.4	120.0	119.4	120.0	120.0	120.0
72		112.0	117.2	112.0	117.2	120.0	120.0
42	144	105.4	110.3	105.4	110.3	120.0	120.0
45		99.5	104.2	99.5	104.2	120.0	120.0
48		94.3	98.7	94.3	98.7	120.0	120.0
51		89.6	93.8	89.6	93.8	120.0	120.0
54		120.0	120.0	120.0	120.0	120.0	120.0
57		114.7	120.0	114.7	120.0	120.0	120.0
60		107.5	112.5	107.5	112.5	120.0	120.0
63		101.2	105.9	101.2	105.9	120.0	120.0
66		95.6	100.0	95.6	100.0	120.0	120.0
69		90.5	94.7	90.5	94.7	120.0	120.0
72		86.0	90.0	86.0	90.0	120.0	120.0

YKK

ap

Quality inspires™

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)
MULLION CAPACITY CHART

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

REMARKS

BY

DATE

DETAIL REVISION

MS

MAR./22

MISC. UPDATES

LS

6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO

LICENSE

No. 73778

STATE OF FLORIDA

PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
FL14217

DATE:
07.31.17

DWG. BY:
AR/RV

CHK. BY:
HFN

SCALE:
NTS

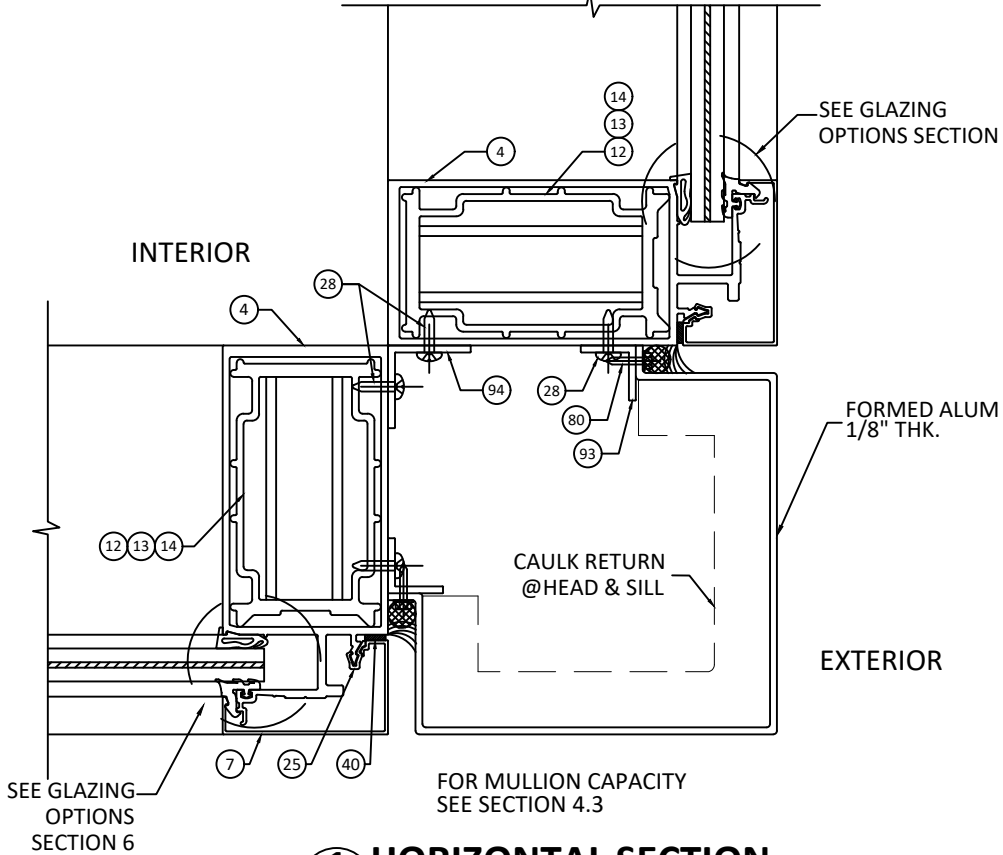
DWG. #:
YKK211

SECTION
4.4A

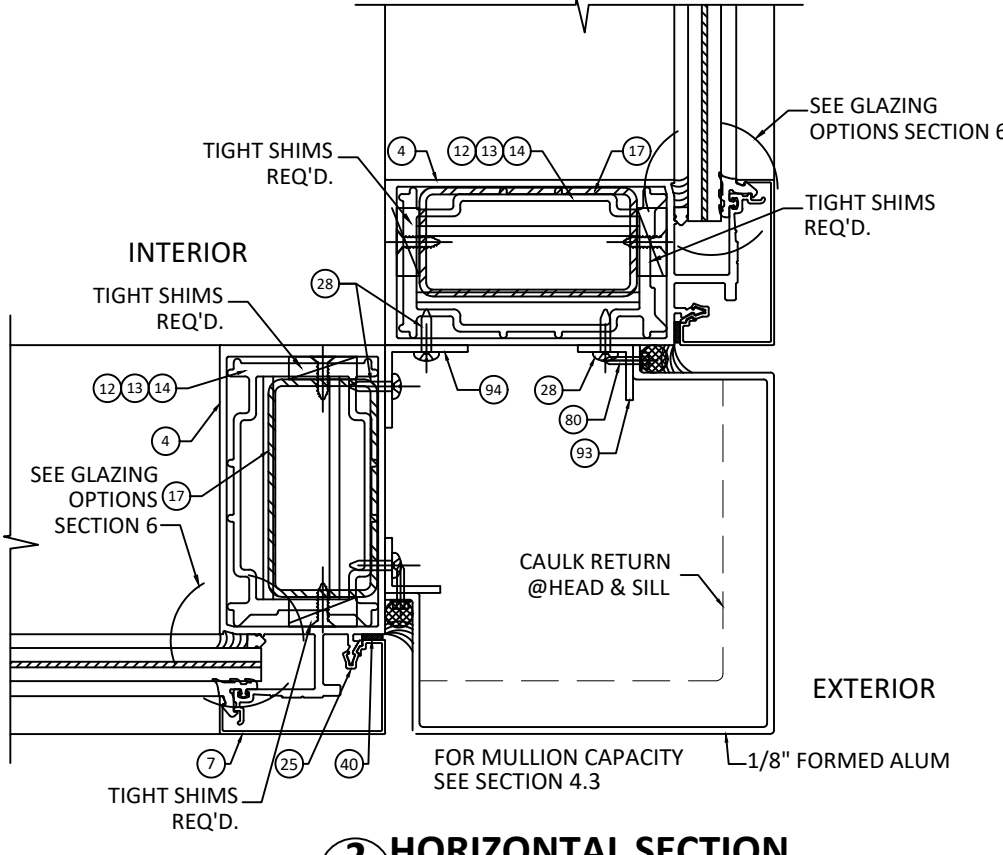
[Page 13 of 48]

c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229\1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvh\ykk 211 - fb14217 dwgs 1 thru 4 - cover, elev. vert & horz dlt.dwg 6/2/2026 11:55 AM

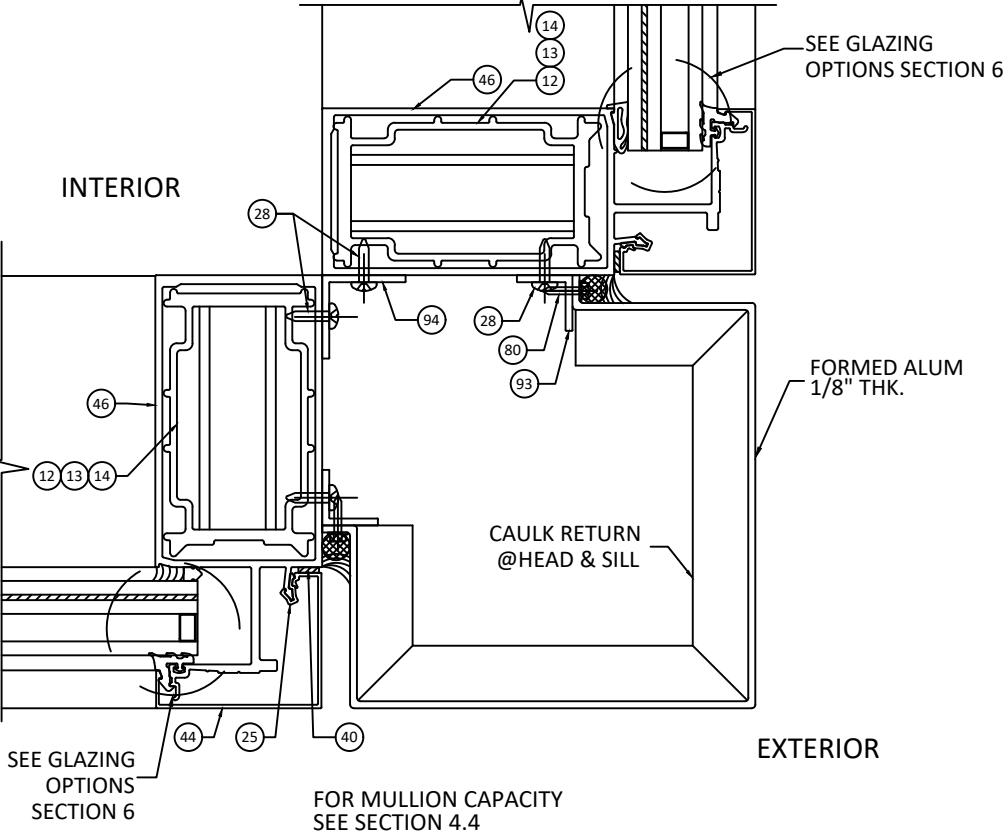
MONO./IG STANDARD CORNER MULLIONS - HORIZONTAL SECTIONS



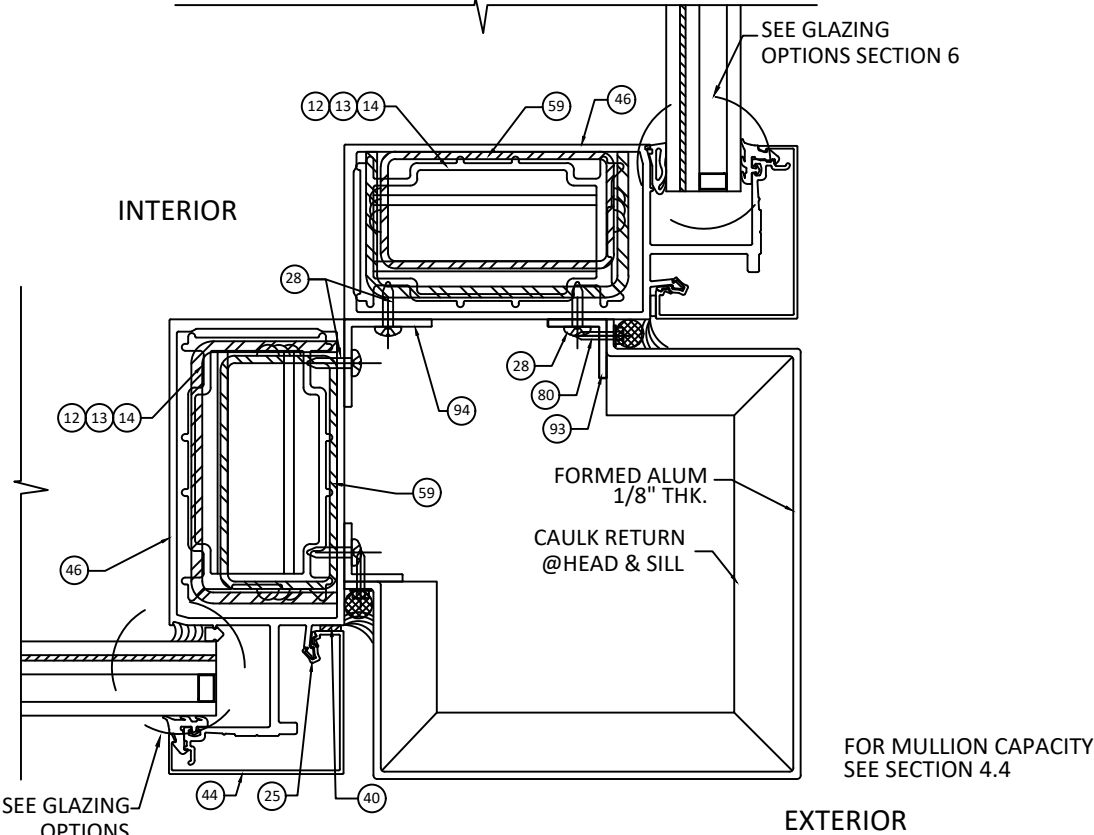
1 HORIZONTAL SECTION
4.6 90° OUTSIDE CORNER
MONOLITHIC GLASS - DRY GLAZED



2 HORIZONTAL SECTION
4.6 90° OUTSIDE CORNER (REINFORCED)
MONOLITHIC GLASS - WET GLAZED



3 HORIZONTAL SECTION
4.6 90° OUTSIDE CORNER
INSULATING GLASS - WET/DRY GLAZED



4 HORIZONTAL SECTION
4.6 90° OUTSIDE CORNER (REINFORCED)
INSULATING GLASS - WET/DRY GLAZED



Quality
inspires™

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

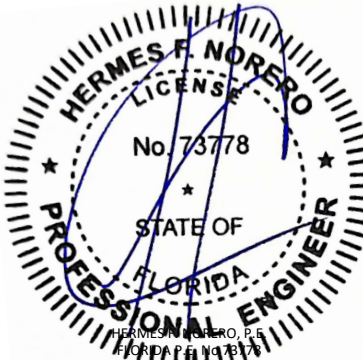
HORIZONTAL SECTIONS (CORNERS)

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL14217

DATE: **07.31.17**

DWG. BY:	CHK. BY:
AR/RV	HFN

SCALE: **NTS**

DWG. #: **YKK211**

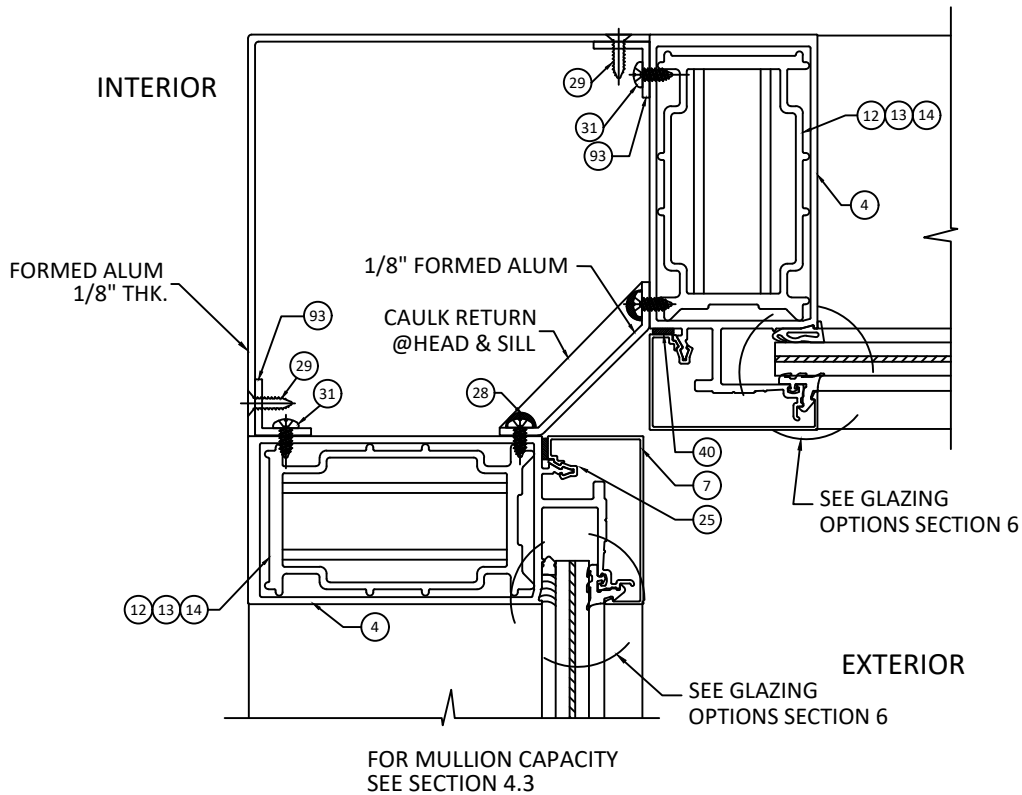
SECTION

4.6

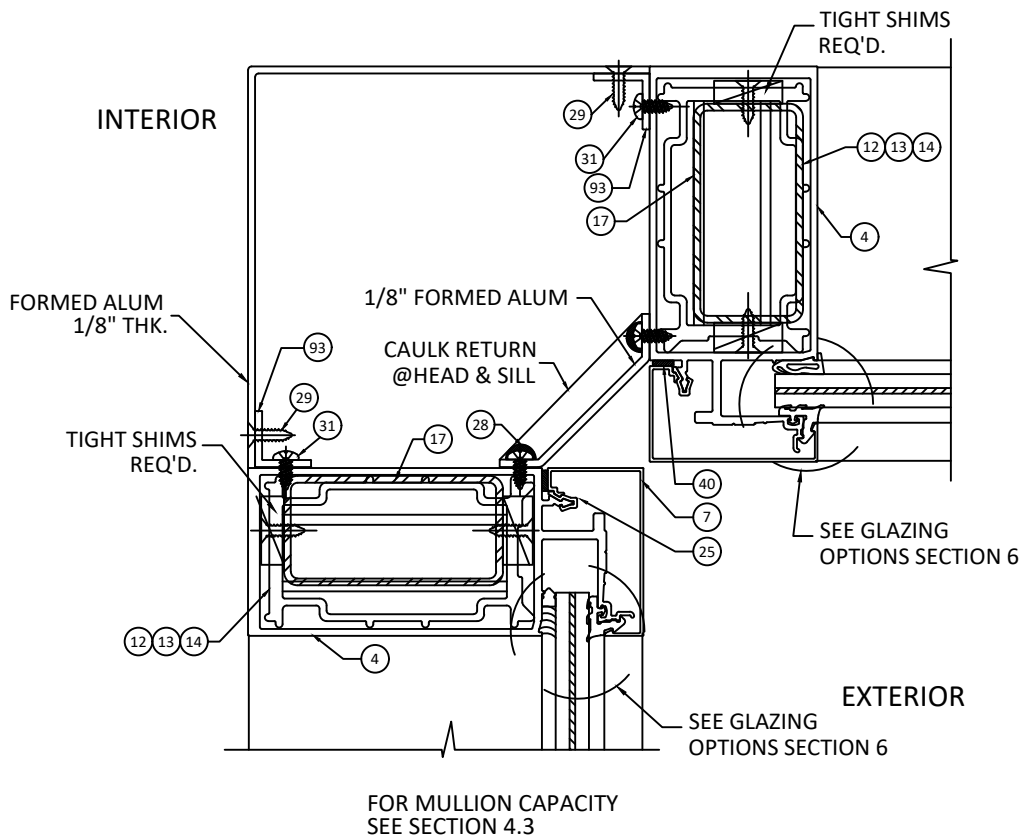
[Page 15 of 48]

c:\users\lucianosanchez\building drops, inc\building drops\projects\ykk ap america, inc\fbc-21-1229.1 - fbc submittal - revisions\dwgs\apc upload\014217\hvh\ykk 211 - f14217 dwgs 1 thru 4 - cover, elev, vert & horz dlt.dwg 6/2/2026 11:55 AM

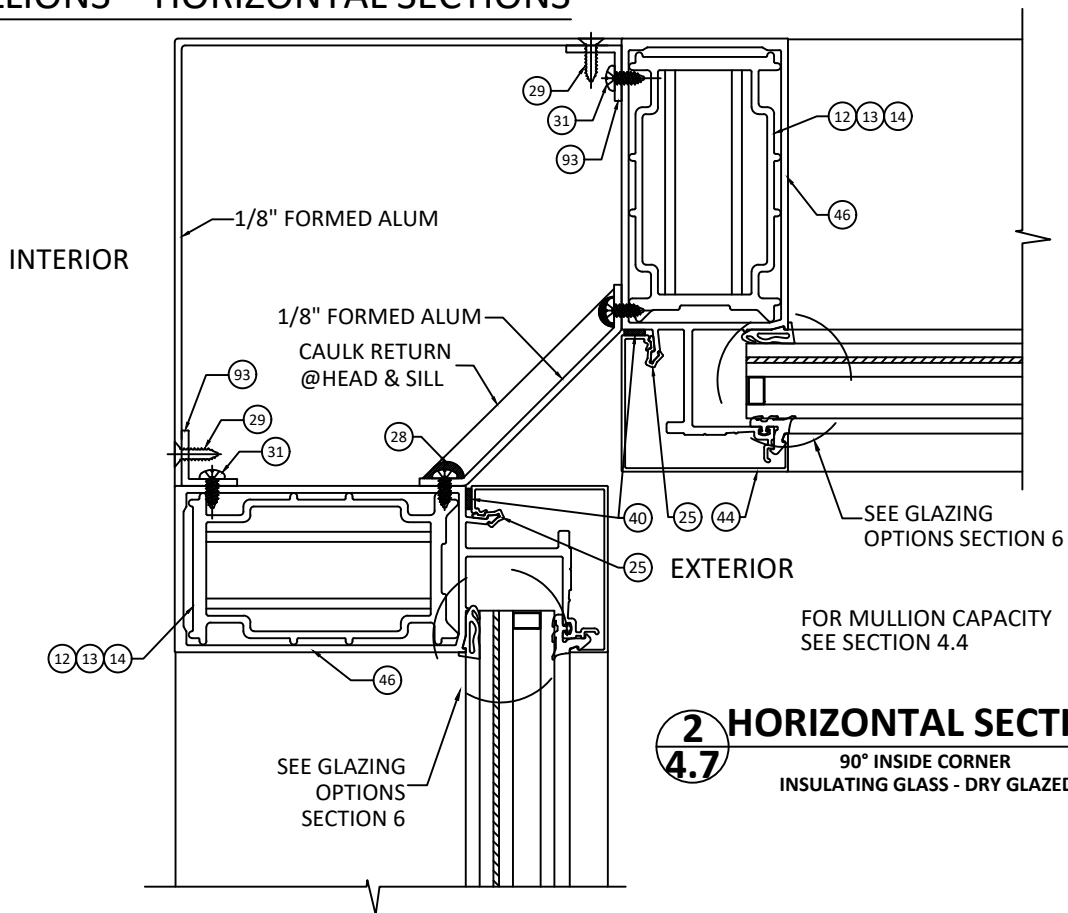
MONO./IG STANDARD CORNER MULLIONS - HORIZONTAL SECTIONS



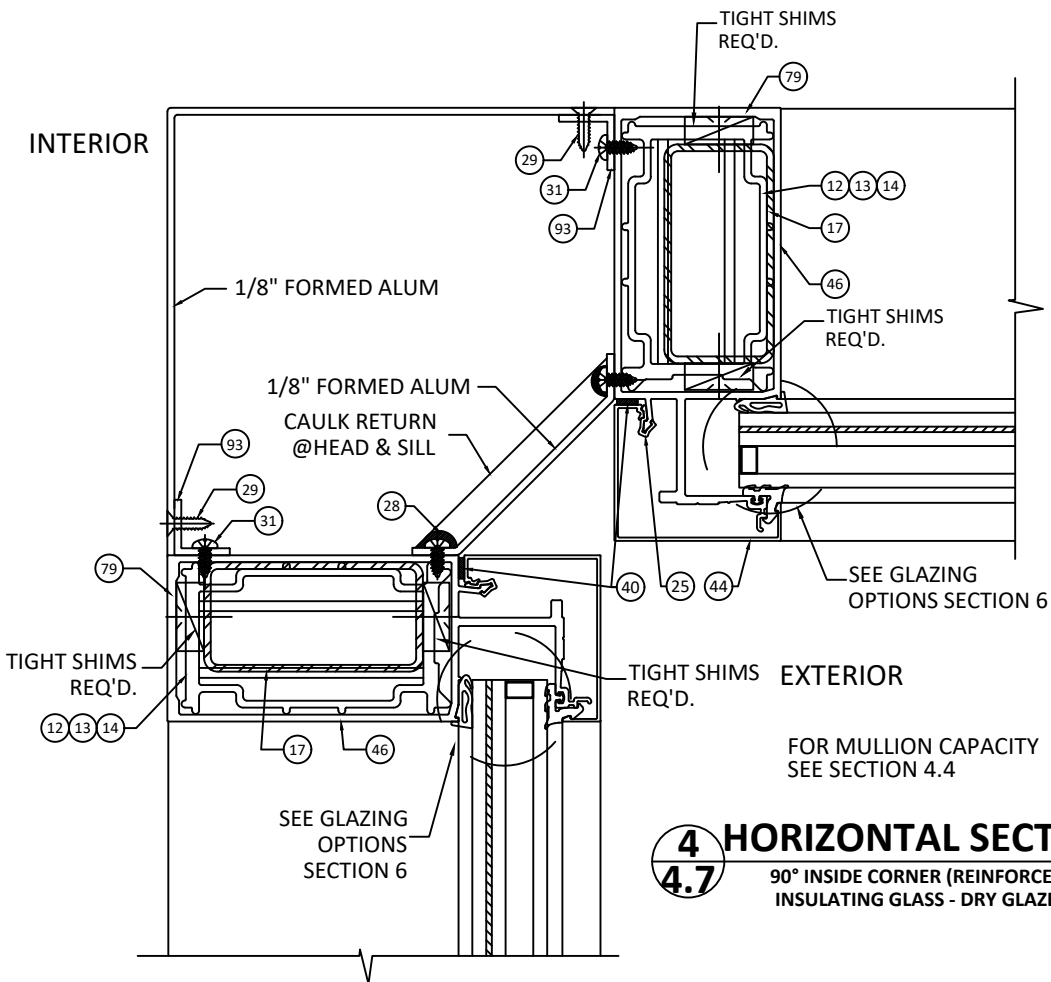
1
4.7 HORIZONTAL SECTION
90° INSIDE CORNER
MONOLITHIC GLASS - WET/DRY GLAZED



3
4.7 HORIZONTAL SECTION
90° INSIDE CORNER (REINFORCED)
MONOLITHIC GLASS - WET/DRY GLAZED



2
4.7 HORIZONTAL SECTION
90° INSIDE CORNER
INSULATING GLASS - DRY GLAZED



4
4.7 HORIZONTAL SECTION
90° INSIDE CORNER (REINFORCED)
INSULATING GLASS - DRY GLAZED



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

HORIZONTAL SECTIONS (CORNERS)

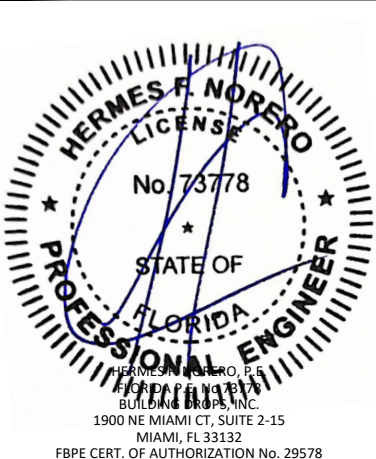
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



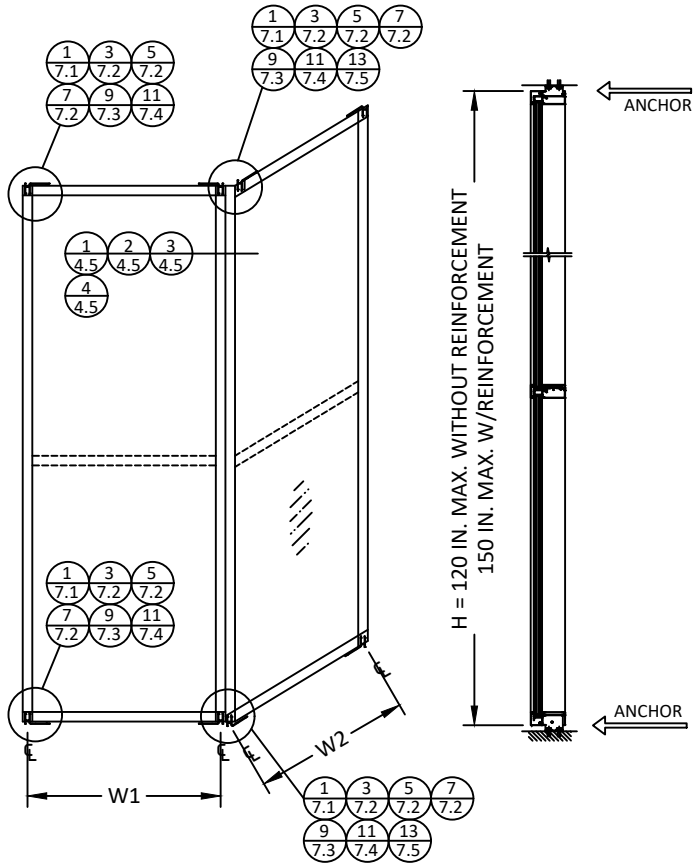
REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT

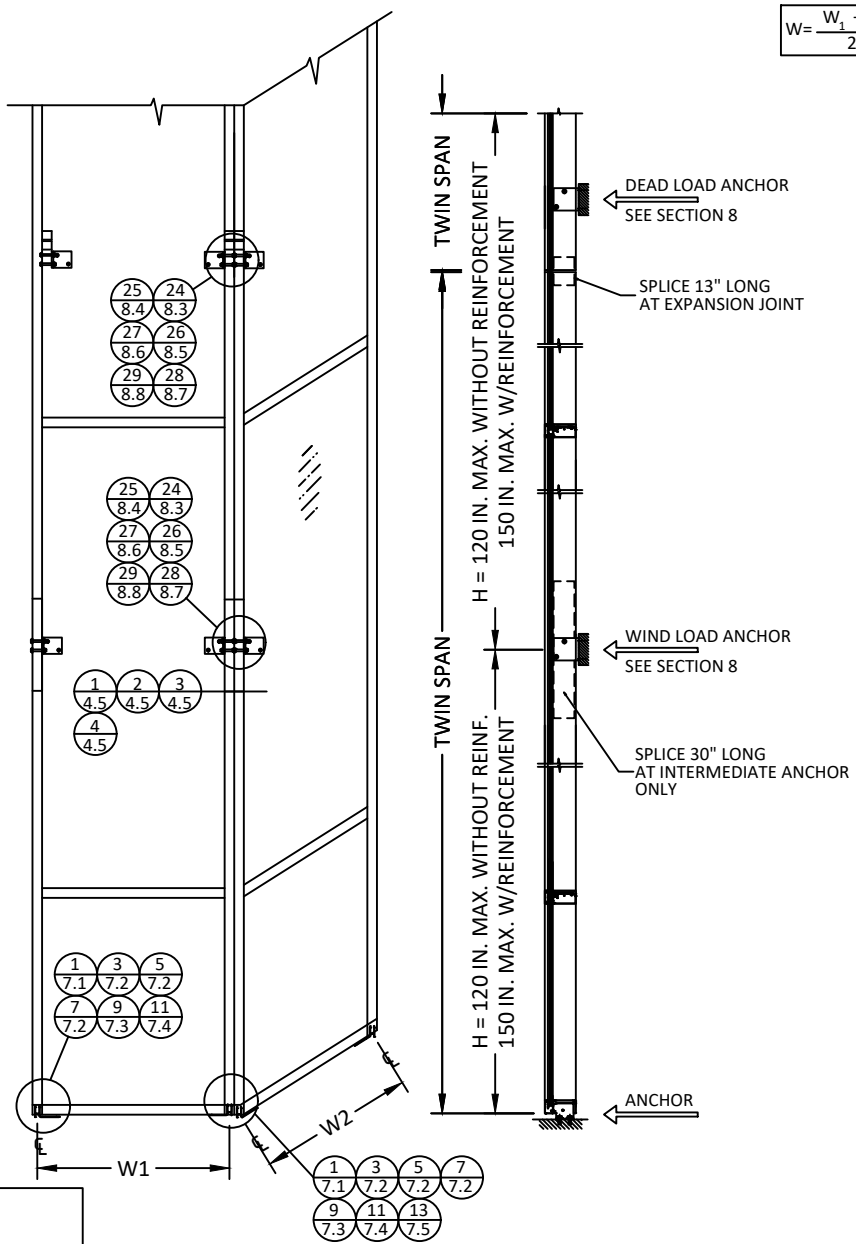


FL #:	FL14217
DATE:	07.31.17
DWG. BY:	AR/RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	YKK211
SECTION	4.7

CORNER MULLION WITH & W/O REINFORCING
SINGLE SPAN WITH HORIZONTAL



CORNER MULLION WITH & W/O REINFORCING
TWIN SPAN WITH HORIZONTAL



$$W = \frac{W_1 + W_2}{2}$$

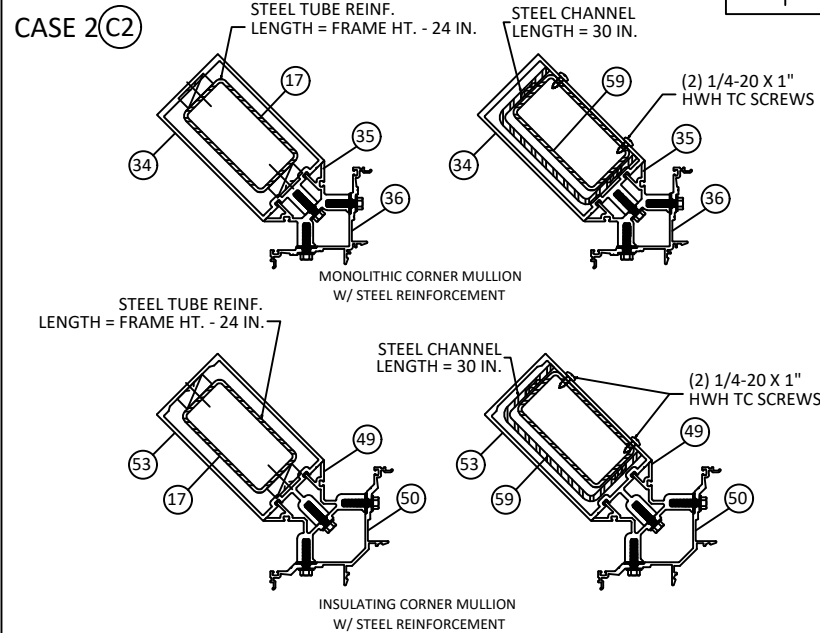
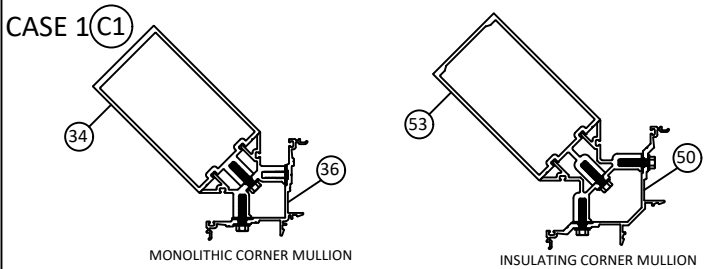
CORNER MULLION CAPACITY CHARTS

CORNER MULLION LOAD CAPACITY (+/- PSF) SINGLE & TWIN SPANS					
NOMINAL DIMS.		CASE 1	CASE 2	CASE 3	
		CORNER MULLION 'C1'	CORNER MULLION WITH STEEL 'C2'	MONO. CORNER MULLION WITH STEEL 'C3'	INS. CORNER MULLION 'C4'
TRIB. WIDTH (W)	SPAN HEIGHT (H)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
30	108	130.0	130.0	130.0	120.0
36		130.0	130.0	130.0	120.0
42		113.0	130.0	130.0	120.0
48		98.9	130.0	130.0	120.0
54		87.9	130.0	130.0	120.0
60		79.1	129.7	130.0	120.0
66	114	71.9	117.9	130.0	120.0
72		65.9	108.1	130.0	120.0
30		130.0	130.0	130.0	120.0
36		118.4	130.0	130.0	120.0
42		101.5	130.0	130.0	120.0
48		88.8	130.0	130.0	120.0
54	120	78.9	129.4	130.0	120.0
60		71.0	116.4	130.0	120.0
66		64.6	105.9	130.0	120.0
72		59.2	97.0	130.0	120.0
30		128.2	130.0	130.0	120.0
36		106.8	130.0	130.0	120.0
42	126	91.6	130.0	130.0	120.0
48		80.1	130.0	130.0	120.0
54		71.2	116.8	130.0	120.0
60		64.1	105.1	130.0	120.0
66		58.3	95.5	130.0	120.0
72		53.4	87.6	130.0	120.0
30	132	-	130.0	130.0	120.0
36		-	130.0	130.0	120.0
42		-	130.0	130.0	120.0
48		-	119.1	130.0	120.0
54		-	105.9	130.0	120.0
60		-	95.3	130.0	120.0
66	138	-	86.6	130.0	120.0
72		-	79.0	130.0	120.0
30		-	130.0	130.0	120.0
36		-	130.0	130.0	120.0
42		-	113.5	130.0	120.0
48		-	99.3	130.0	120.0
54	144	-	88.3	130.0	120.0
60		-	79.5	130.0	120.0
66		-	73.0	130.0	120.0
72		-	66.2	130.0	120.0
30		-	130.0	130.0	120.0
36		-	110.3	130.0	120.0
42	150	-	94.5	130.0	120.0
48		-	82.7	130.0	120.0
54		-	73.5	130.0	120.0
60		-	66.2	130.0	120.0
66		-	66.2	130.0	120.0
72		-	66.2	130.0	120.0

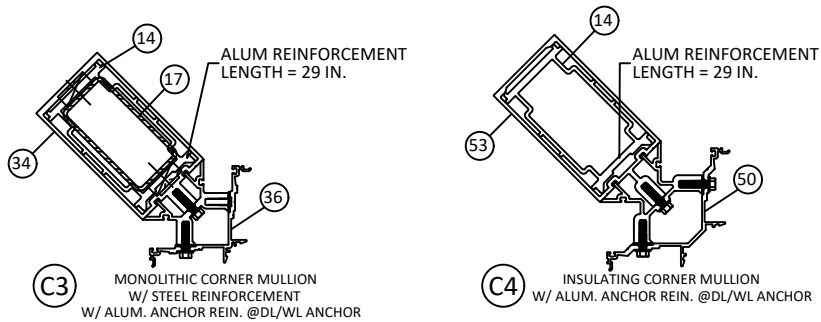
NOTE:

USE 'F' ANCHOR CLIP AT JAMB AND
'T' ANCHOR CLIP AT MULLION. SEE SECTION 7 FOR DETAILS

CASE 1: SINGLE SPAN WITH UNREINFORCED MULLION
CASE 2: SINGLE SPAN WITH REINFORCED MULLION FULL HEIGHT
CASE 3: TWIN SPAN WITH ANCHOR SLEEVE AT INTERMEDIATE SUPPORT ONLY, WITH OR WITHOUT STEEL REINFORCED MULLION



CASE 3



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

MULLION CAPACITY CHARTS

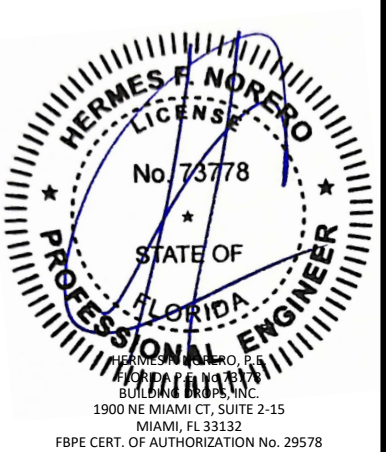
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: 07.31.17

DWG. BY: AR/RV
CHK. BY: HFN

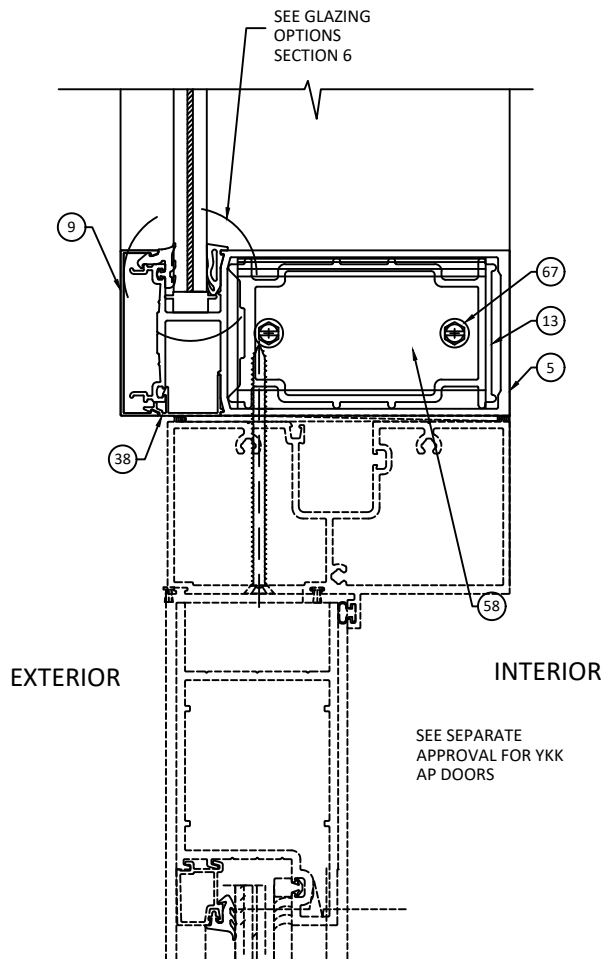
SCALE: NTS

DWG. #: YKK211

SECTION

4.8

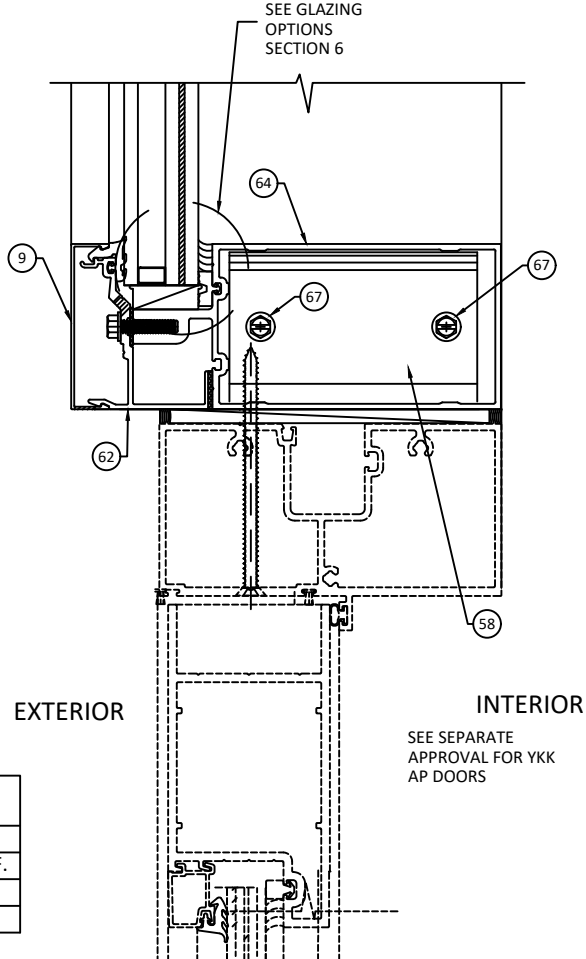
c:\users\luciano\documents\common\projects\ykk ap america, inc\doc-21-1229-1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvh\ykk 211 - f14217 dwgs 5 & 6 - door & glazing dtls.dwg 6/2/2026 11:55 AM



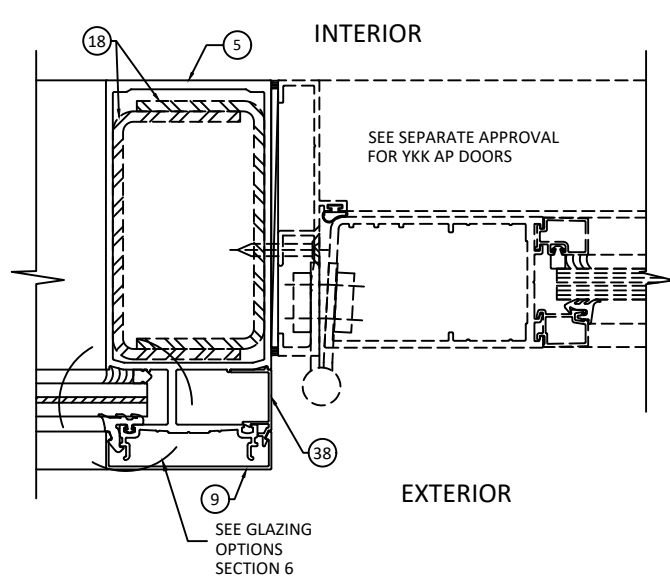
1
5.0 CONNECTION DETAIL
FRAME MULLION / DOOR HEAD
MONOLITHIC MULLION
W/ SPLICE REINFORCEMENT

HORIZ. SPAN MAX.	LIMIT MAX. DESIGN LOADS FOR HORIZONTAL ABOVE DOOR AS FOLLOWS	
	DESIGN LOAD W/O SPLICE REINF.	W/ SPLICE REINF.
97'-3/4"	65 PSF	80 PSF
85'-3/4"	85 PSF	90 PSF

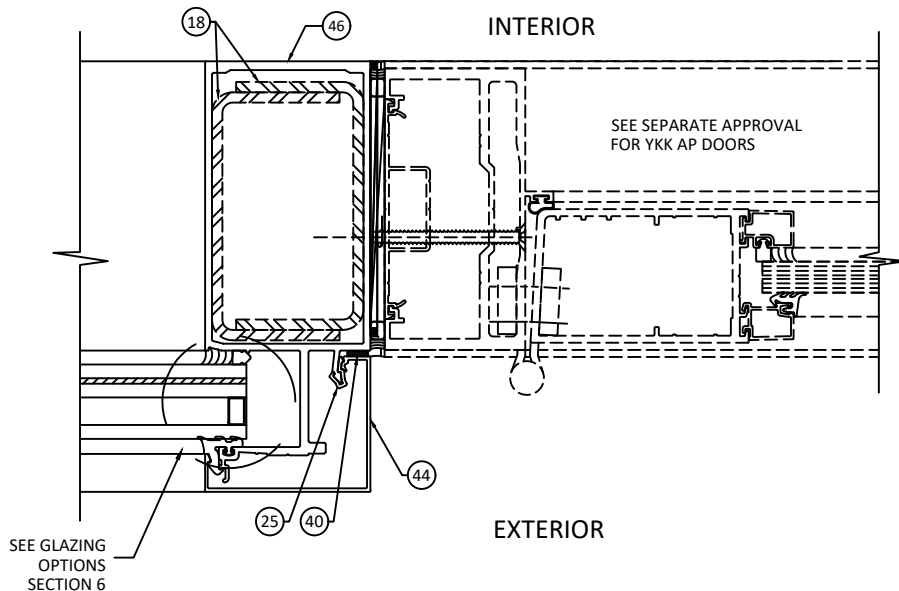
NOTE:
FOR "S" ANCHOR DETAILS
REFER TO SECTION 7.



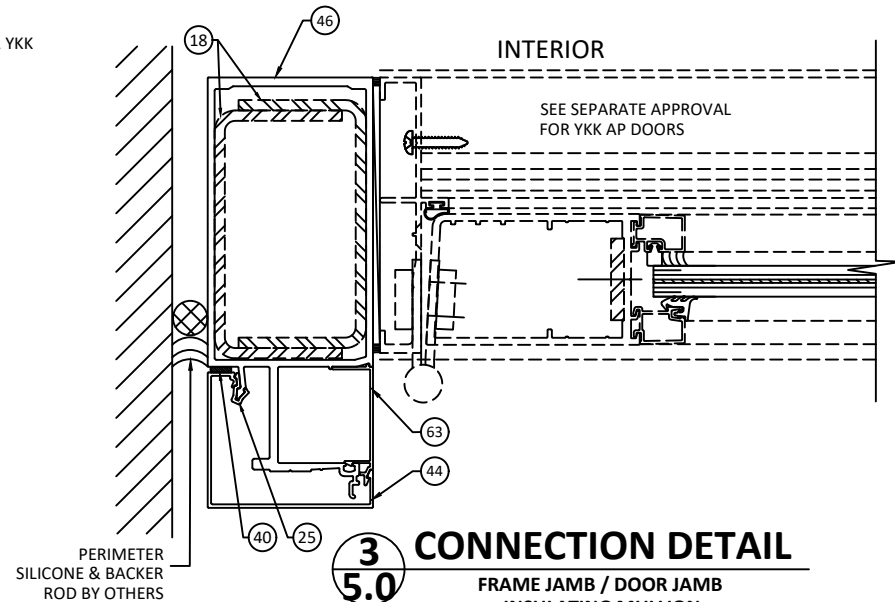
2
5.0 CONNECTION DETAIL
FRAME MULLION / DOOR HEAD
INSULATING MULLION
W/O SPLICE REINFORCEMENT



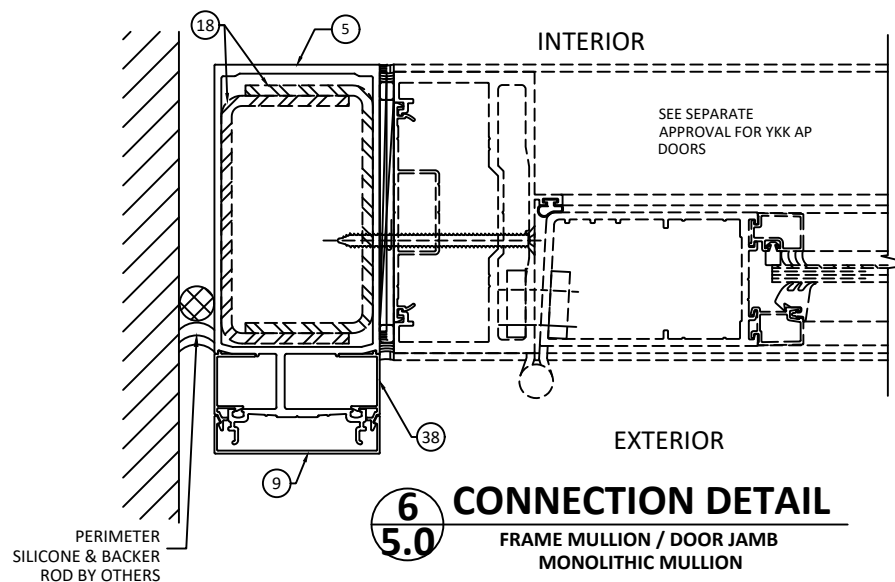
4
5.0 CONNECTION DETAIL
FRAME MULLION / DOOR JAMB
MONOLITHIC MULLION



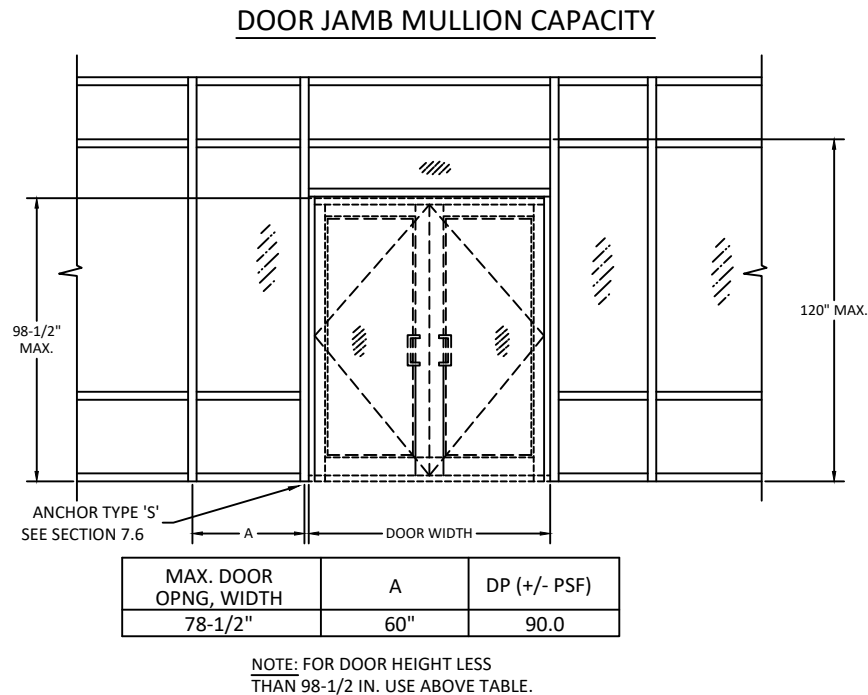
5
5.0 CONNECTION DETAIL
FRAME MULLION / DOOR JAMB
INSULATING MULLION



3
5.0 CONNECTION DETAIL
FRAME JAMB / DOOR JAMB
INSULATING MULLION



6
5.0 CONNECTION DETAIL
FRAME MULLION / DOOR JAMB
MONOLITHIC MULLION



DOOR JAMB MULLION CAPACITY



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

DOOR CONNECTION DETAILS

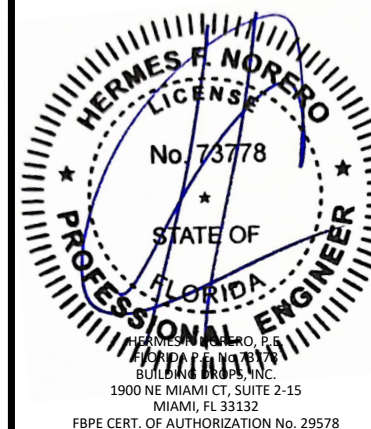
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **YKK211**

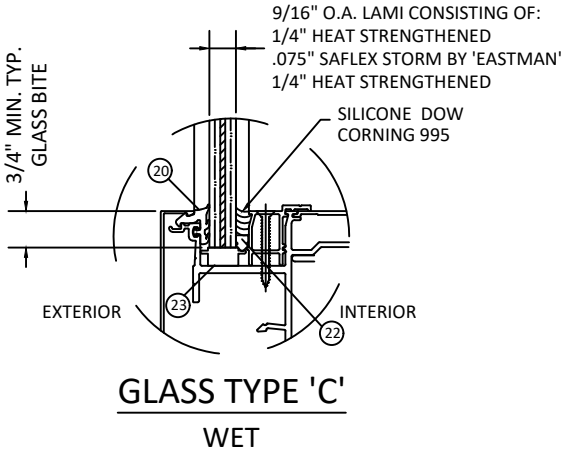
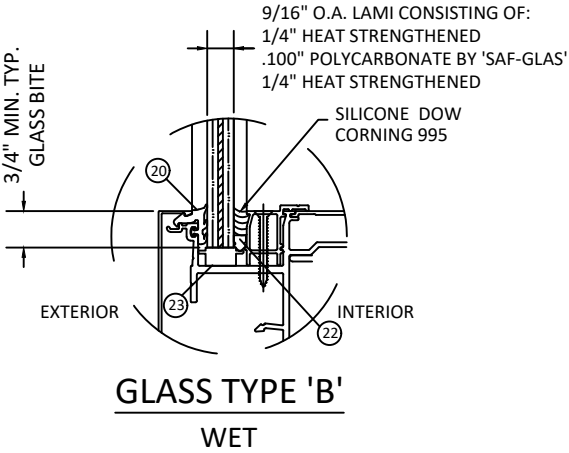
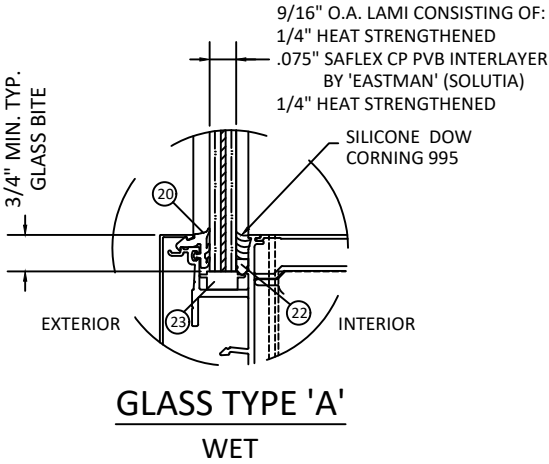
SECTION

5.0

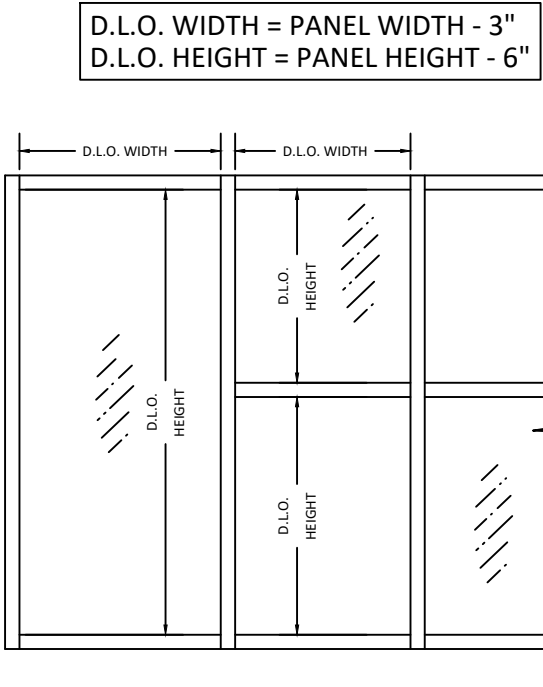
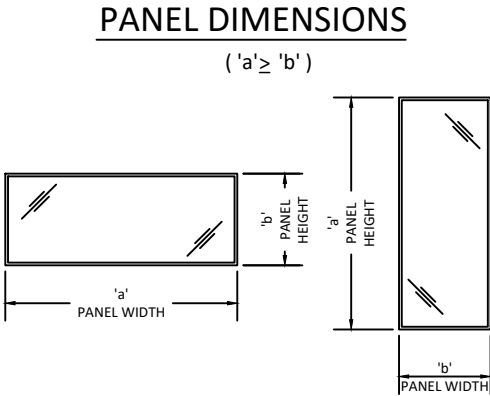
MONOLITHIC GLASS CAPACITY (LMI)

- NOTES
- CHART VALUES PROVIDE MAXIMUM DESIGN PRESSURES ACCORDING TO ASTM E1300 FOR GIVEN GLASS DIMENSIONS 'a' AND 'b' (a ≥ b), AND CH. 17 OF THE FBC FOR SIZES OTHER THAN TESTED
 - DO NOT EXCEED MULLION CAPACITY SELECTED OR ANCHOR CAPACITY IN DESIGN PRESSURE CHARTS
 - ALLOW FOR SPLAY OF 2.5" AT EACH SIDE, FOR A TOTAL SPLAY OF 5", AT ALL GLASS LOCATIONS.

GLASS LOAD CAPACITY (PSF)			
NOMINAL DIMS.		GLASS TYPES 'A'	GLASS TYPES 'B' & 'C'
D.L.O. WIDTH (IN)	D.L.O. HEIGHT (IN)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
27	60	130.0	120.0
33		130.0	120.0
39		130.0	120.0
45		130.0	120.0
51		130.0	120.0
57		130.0	120.0
63		117.9	108.8
69	66	109.3	100.8
27		130.0	120.0
33		130.0	120.0
39		130.0	120.0
45		130.0	120.0
51		130.0	120.0
57		130.0	120.0
63	72	117.6	108.6
69		107.6	99.3
27		130.0	120.0
33		130.0	120.0
39		130.0	120.0
45		130.0	120.0
51		130.0	120.0
57	78	130.0	120.0
63		117.6	108.6
69		107.4	99.1
27		130.0	120.0
33		130.0	120.0
39		130.0	120.0
45		130.0	120.0
51	84	130.0	120.0
57		130.0	120.0
63		117.6	108.6
69		107.4	99.1
27		130.0	120.0
33		130.0	120.0
39		130.0	120.0
45	90	130.0	120.0
51		130.0	120.0
57		130.0	120.0
63		117.6	108.6
69		107.4	99.1
27		130.0	120.0
33		130.0	120.0
39	94.5	130.0	120.0
45		130.0	120.0
51		130.0	120.0
57		130.0	120.0
63		123.0	120.0



- * NOTE:
- GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300 (3 SEC. GUSTS) AND CHAPTER 17 OF THE CURRENT FBC FOR SIZES OTHER THAN TESTED.
 - SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN CHAPTER 24.
 - SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER CHAPTER 24.
 - D.L.O. MAY NOT EXCEED MAX DIMENSIONS IN GLASS CHARTS FOR GLASS TYPE.



YKK AP Quality inspires™

YKK AP AMERICA, Inc.

1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE: YHC 300 IG CURTAIN WALL SYSTEM (HVHZ) (IMPACT)

GLAZING DETAILS

PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

B.D. BUILDING DROPS

REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO
LICENSE
No. 73778
STATE OF FLORIDA
PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #: **FL14217**

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **YKK211**

SECTION

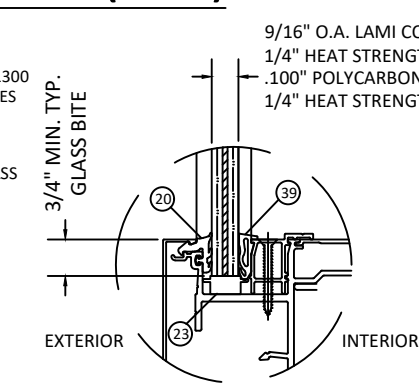
6.0

[Page 19 of 48]

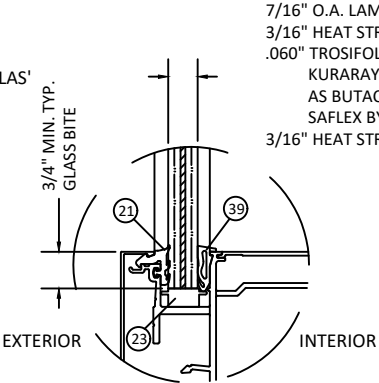
MONOLITHIC GLASS CAPACITY (SMI)

- NOTES
- CHART VALUES PROVIDE MAXIMUM DESIGN PRESSURES ACCORDING TO ASTM E1300 FOR GIVEN GLASS DIMENSIONS 'a' AND 'b' ($a \geq b$), AND CH. 17 OF THE FBC FOR SIZES OTHER THAN TESTED
 - DO NOT EXCEED MULLION CAPACITY SELECTED OR ANCHOR CAPACITY IN DESIGN PRESSURE CHARTS
 - ALLOW FOR SPLAY OF 2.5° AT EACH SIDE, FOR A TOTAL SPLAY OF 5°, AT ALL GLASS LOCATIONS.

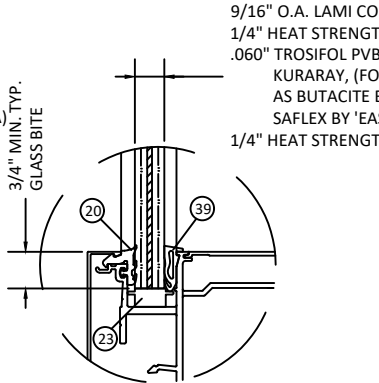
GLASS LOAD CAPACITY (PSF)						
NOMINAL DIMS.		GLASS TYPES 'F', 'G', 'H' & 'J'	GLASS TYPE 'K'	GLASS TYPE 'L'	GLASS TYPES 'M' & 'N'	GLASS TYPES 'E' & 'P'
D.L.O. WIDTH (IN)	D.L.O. HEIGHT (IN)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
27	60	90.0	130.0	130.0	130.0	120.0
33		90.0	130.0	130.0	130.0	120.0
39		90.0	130.0	130.0	130.0	120.0
45		90.0	130.0	130.0	130.0	120.0
51		90.0	130.0	130.0	130.0	120.0
57	66	90.0	130.0	130.0	130.0	120.0
63		81.6	112.3	112.3	112.3	108.8
69		75.6	95.0	95.0	95.0	100.8
27		90.0	130.0	130.0	130.0	120.0
33		90.0	130.0	130.0	130.0	120.0
39	72	90.0	130.0	130.0	130.0	120.0
45		90.0	130.0	130.0	130.0	120.0
51		90.0	130.0	130.0	130.0	120.0
57		90.0	130.0	130.0	130.0	120.0
63		81.4	117.6	117.6	117.6	108.6
69	78	74.5	102.9	102.9	102.9	99.3
27		90.0	130.0	130.0	130.0	120.0
33		90.0	130.0	130.0	130.0	120.0
39		90.0	130.0	130.0	130.0	120.0
45		90.0	130.0	130.0	130.0	120.0
51	84	90.0	130.0	130.0	130.0	120.0
57		90.0	130.0	130.0	130.0	120.0
63		90.0	130.0	130.0	130.0	120.0
69		90.0	130.0	130.0	130.0	120.0
27		90.0	126.0	130.0	130.0	120.0
33	90	90.0	118.0	130.0	130.0	120.0
39		90.0	111.0	130.0	130.0	120.0
45		81.4	105.0	117.6	117.6	108.6
51		90.0	130.0	130.0	130.0	120.0
57		90.0	130.0	130.0	130.0	120.0
27	94.5	90.0	130.0	130.0	130.0	120.0
33		90.0	130.0	130.0	130.0	120.0
39		90.0	128.0	130.0	130.0	120.0
45		90.0	113.0	130.0	130.0	120.0
51		90.0	103.0	130.0	130.0	120.0
57		90.0	98.5	123.0	130.0	120.0



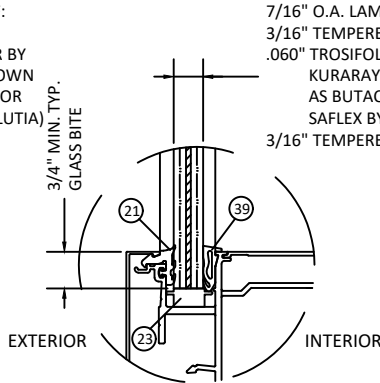
GLASS TYPE 'E'
DRY



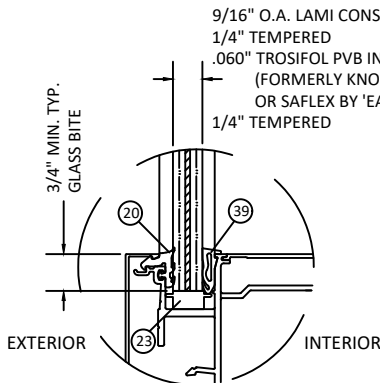
GLASS TYPE 'F'
DRY



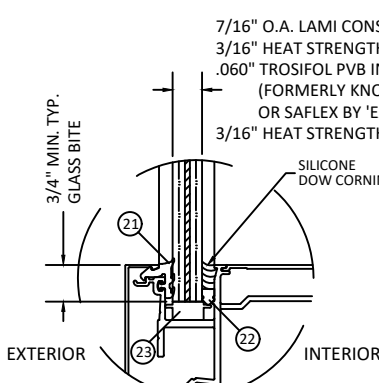
GLASS TYPE 'G'
DRY



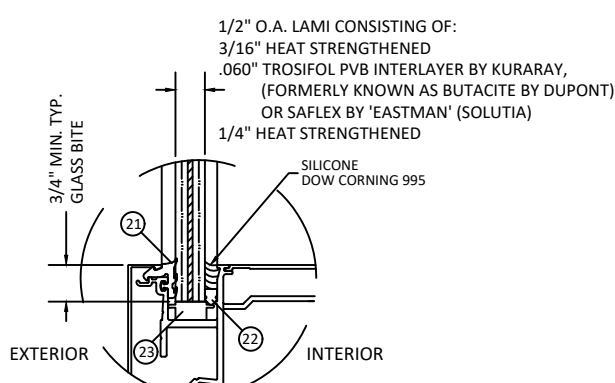
GLASS TYPE 'H'
DRY



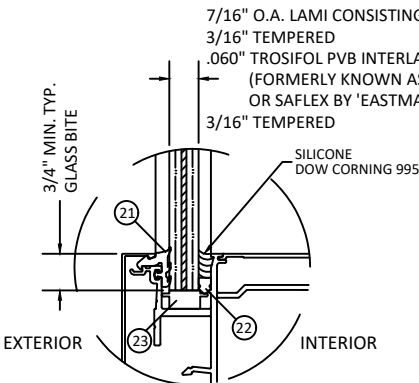
GLASS TYPE 'J'
DRY



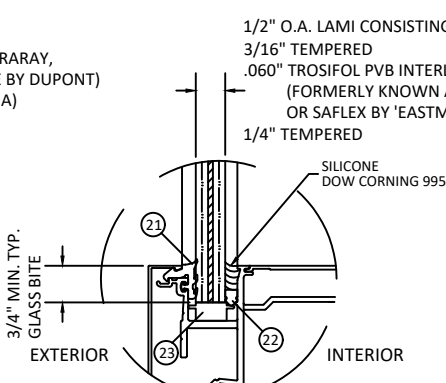
GLASS TYPE 'K'
WET



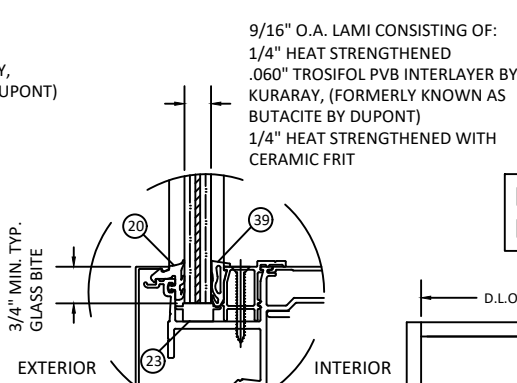
GLASS TYPE 'L'
WET



GLASS TYPE 'M'
WET



GLASS TYPE 'N'
WET

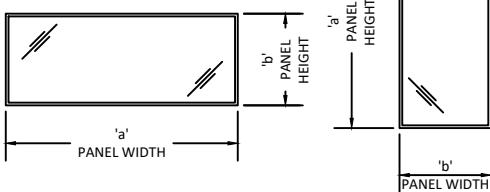


GLASS TYPE 'P'
DRY

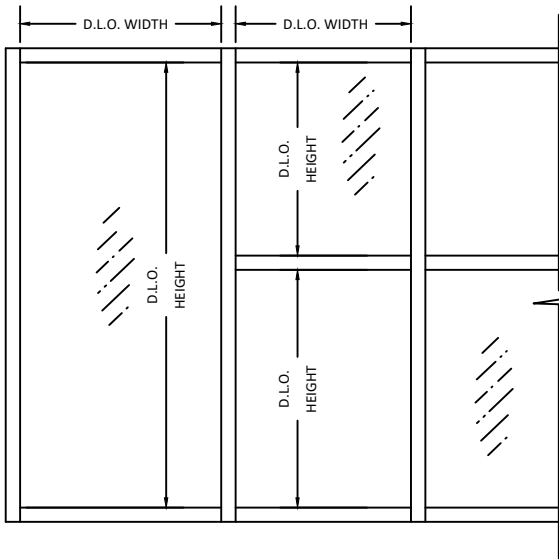
- * NOTE:
- GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300 (3 SEC. GUSTS) AND CHAPTER 17 OF THE CURRENT FBC FOR SIZES OTHER THAN TESTED.
 - SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN CHAPTER 24.
 - SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER CHAPTER 24.
 - D.L.O. MAY NOT EXCEED MAX DIMENSIONS IN GLASS CHARTS FOR GLASS TYPE.

PANEL DIMENSIONS

('a' $\geq$ 'b')



D.L.O. WIDTH = PANEL WIDTH - 3"
D.L.O. HEIGHT = PANEL HEIGHT - 6"



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

GLAZING DETAILS

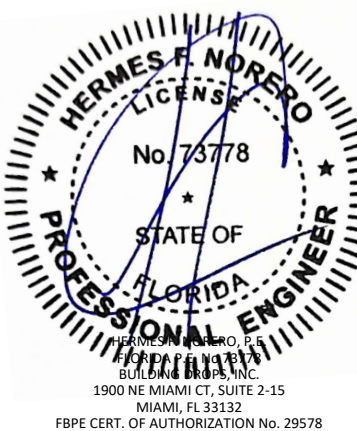
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:	FL14217
DATE:	07.31.17
DWG. BY:	AR/RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	YKK211

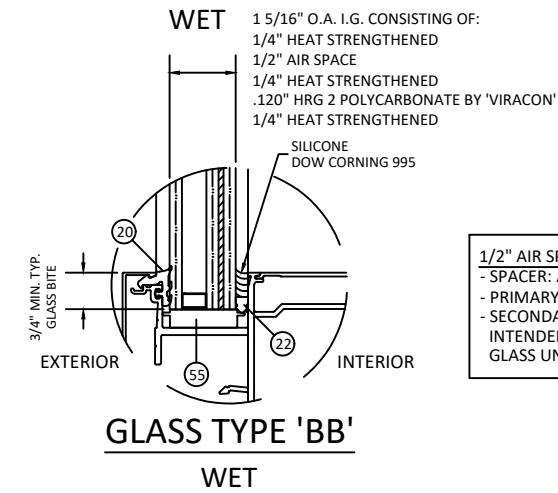
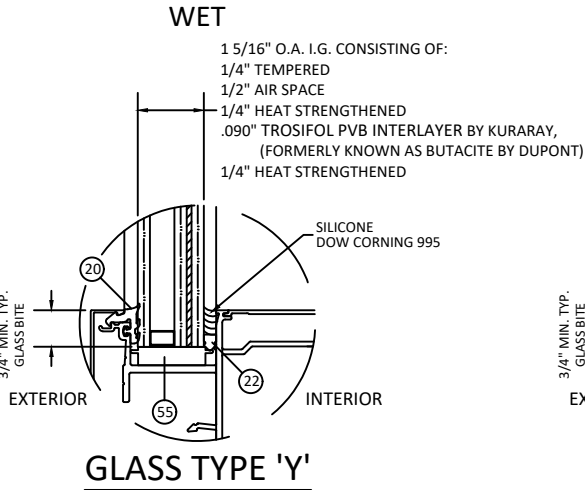
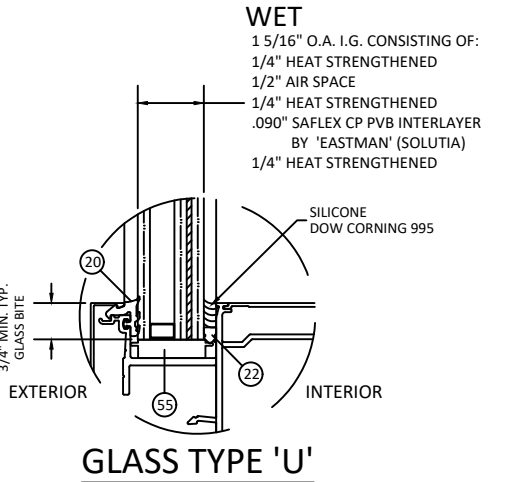
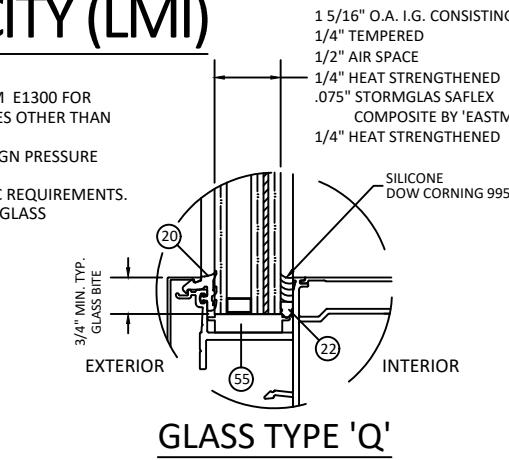
SECTION

6.1

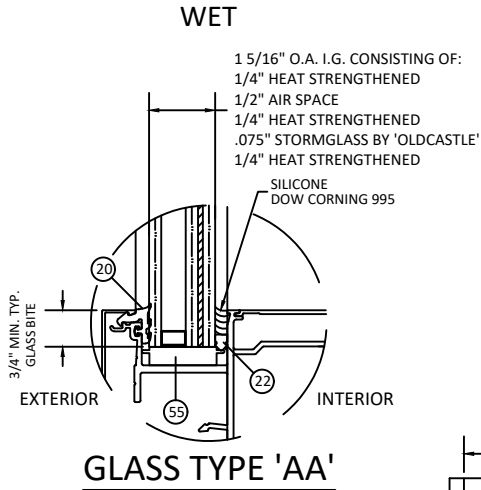
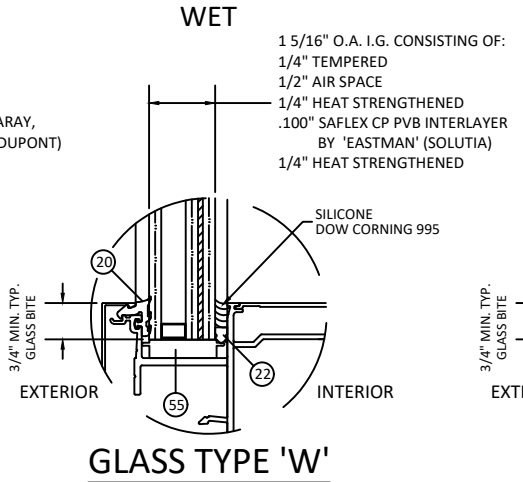
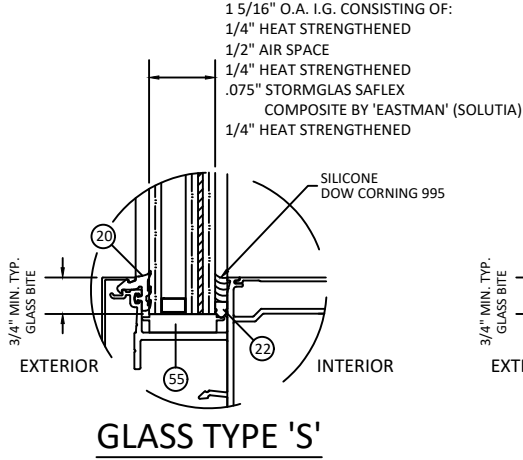
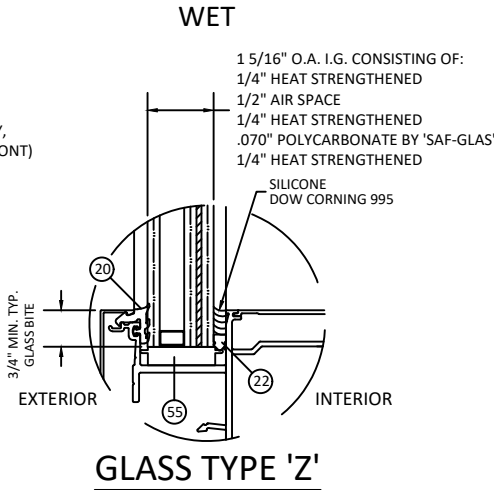
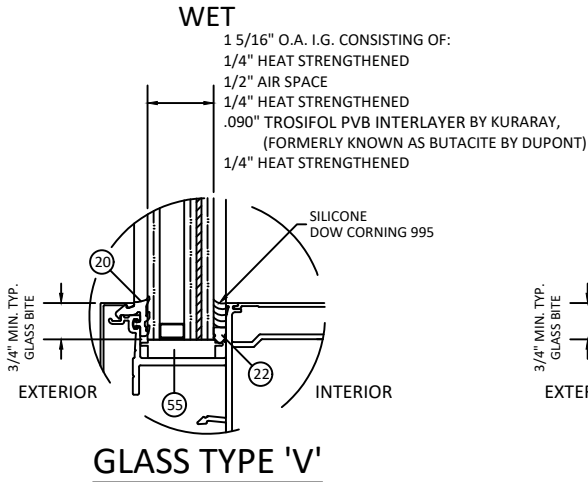
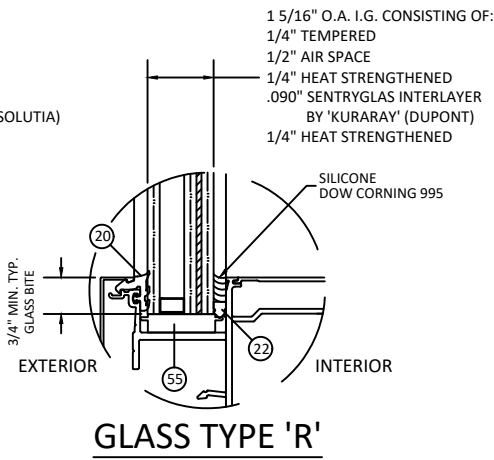
INSULATED GLASS CAPACITY (LMI)

- NOTES
- CHART VALUES PROVIDE MAXIMUM DESIGN PRESSURES ACCORDING TO ASTM E1300 FOR GIVEN GLASS DIMENSIONS 'a' AND 'b' (a ≥ b), AND CH. 17 OF THE FBC FOR SIZES OTHER THAN TESTED
 - DO NOT EXCEED MULLION CAPACITY SELECTED OR ANCHOR CAPACITY IN DESIGN PRESSURE CHARTS
 - INSTALLATION OVER 30 FEET ABOVE GRADE SHALL BE SAFETY GLAZED PER FBC REQUIREMENTS.
 - ALLOW FOR SPLAY OF 2.5" AT EACH SIDE, FOR A TOTAL SPLAY OF 5", AT ALL GLASS LOCATIONS.

GLASS LOAD CAPACITY (PSF)					
NOMINAL DIMS.		GLASS TYPES 'Q', 'R', 'S', 'Z', 'AA', 'BB'	GLASS TYPES 'T', 'W'	GLASS TYPES 'U', 'V', 'X' & 'Y'	
D.L.O. WIDTH (IN)	D.L.O. HEIGHT (IN)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
27	60	120.0	86.0	90.0	70.0
33		120.0	86.0	90.0	70.0
39		120.0	86.0	90.0	70.0
45		120.0	86.0	90.0	70.0
51		120.0	86.0	90.0	70.0
57		120.0	86.0	90.0	70.0
63		103.6	78.0	81.6	63.5
69	66	87.7	72.3	75.6	58.8
27		120.0	86.0	90.0	70.0
33		120.0	86.0	90.0	70.0
39		120.0	86.0	90.0	70.0
45		120.0	86.0	90.0	70.0
51		120.0	86.0	90.0	70.0
57		120.0	86.0	90.0	70.0
63	72	108.6	77.8	81.4	63.3
69		95.0	71.2	74.5	57.9
27		120.0	86.0	90.0	70.0
33		120.0	86.0	90.0	70.0
39		120.0	86.0	90.0	70.0
45		120.0	86.0	90.0	70.0
51		120.0	86.0	90.0	70.0
57	78	120.0	86.0	90.0	70.0
63		108.6	77.8	81.4	63.3
69		99.1	71.0	74.3	57.8
27		120.0	86.0	90.0	70.0
33		120.0	86.0	90.0	70.0
39		120.0	86.0	90.0	70.0
45		120.0	86.0	90.0	70.0
51	84	120.0	86.0	90.0	70.0
57		120.0	86.0	90.0	70.0
63		120.0	86.0	90.0	70.0
69		108.6	77.8	81.4	63.3
27		120.0	86.0	90.0	70.0
33		120.0	86.0	90.0	70.0
39		120.0	86.0	90.0	70.0
45	90	120.0	86.0	90.0	70.0
51		120.0	86.0	90.0	70.0
57		120.0	86.0	90.0	70.0
63		120.0	86.0	90.0	70.0
69		108.6	77.8	81.4	63.3
27		120.0	86.0	90.0	70.0
33		120.0	86.0	90.0	70.0
39	94.5	120.0	86.0	90.0	70.0
45		120.0	86.0	90.0	70.0
51		120.0	86.0	90.0	70.0
57		120.0	86.0	90.0	70.0
63		120.0	86.0	90.0	70.0
69		108.6	77.8	81.4	63.3
27		120.0	86.0	90.0	70.0

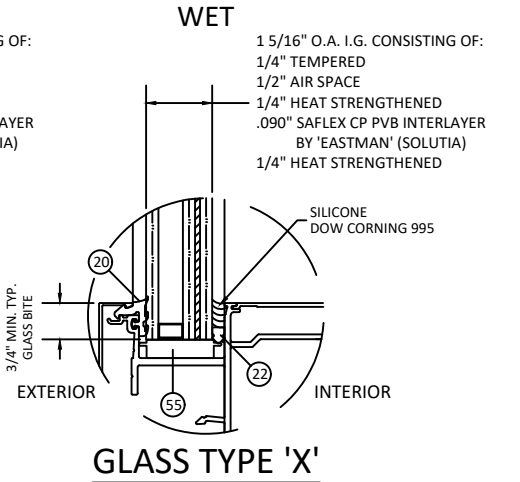
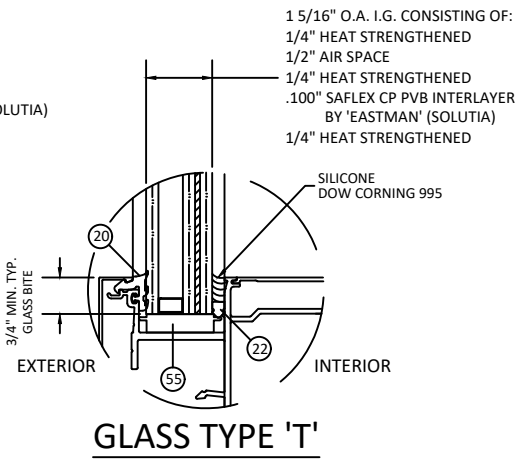
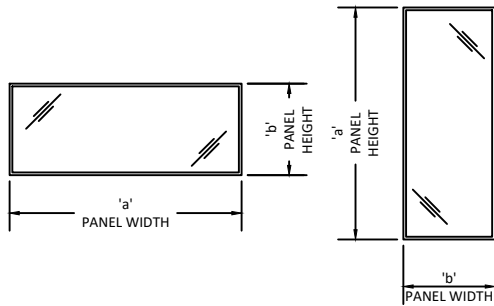


- 1/2" AIR SPACE CONSISTING OF :
- SPACER: ALUMINUM BOX SPACER.
- PRIMARY SEALANT: POLYISOBUTYLENE (PIB).
- SECONDARY SEALANT: STRUCTURAL SILICONE INTENDED FOR FABRICATION OF INSULATING GLASS UNITS.



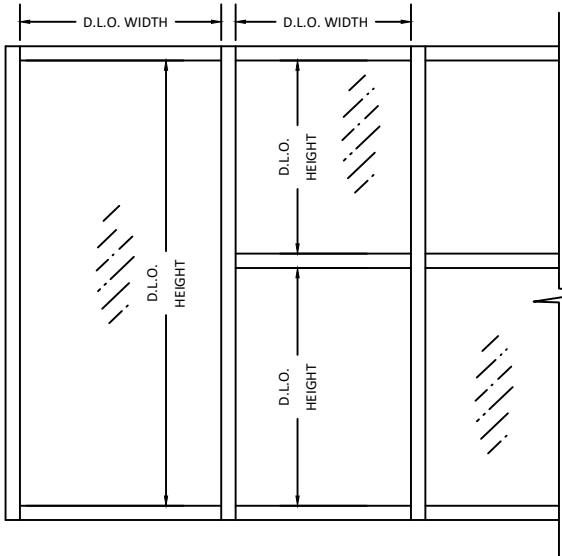
PANEL DIMENSIONS

('a' ≥ 'b')



- * NOTE:
- GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300 (3 SEC. GUSTS) AND CHAPTER 17 OF THE CURRENT FBC FOR SIZES OTHER THAN TESTED.
 - SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN CHAPTER 24.
 - SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER CHAPTER 24.
 - D.L.O. MAY NOT EXCEED MAX DIMENSIONS IN GLASS CHARTS FOR GLASS TYPE.

D.L.O. WIDTH = PANEL WIDTH - 3"
D.L.O. HEIGHT = PANEL HEIGHT - 6"



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

GLAZING DETAILS

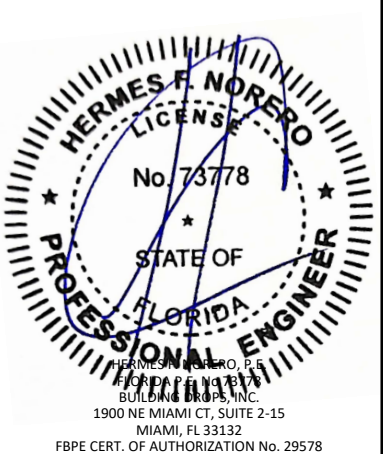
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **YKK211**

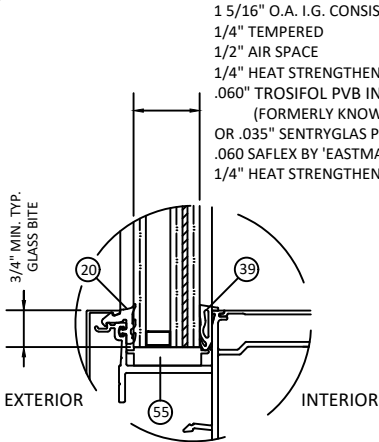
SECTION

6.2

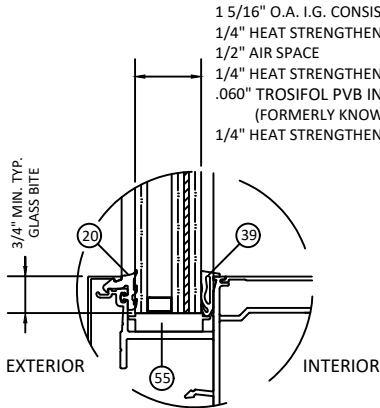
INSULATED GLASS CAPACITY (SMI)

- NOTES
- CHART VALUES PROVIDE MAXIMUM DESIGN PRESSURES ACCORDING TO ASTM E1300 FOR GIVEN GLASS DIMENSIONS 'a' AND 'b' (a > b), AND CH. 17 OF THE FBC FOR SIZES OTHER THAN TESTED
 - DO NOT EXCEED MULLION CAPACITY SELECTED OR ANCHOR CAPACITY IN DESIGN PRESSURE CHARTS
 - ALLOW FOR SPLAY OF 2.5° AT EACH SIDE, FOR A TOTAL SPLAY OF 5°, AT ALL GLASS LOCATIONS.

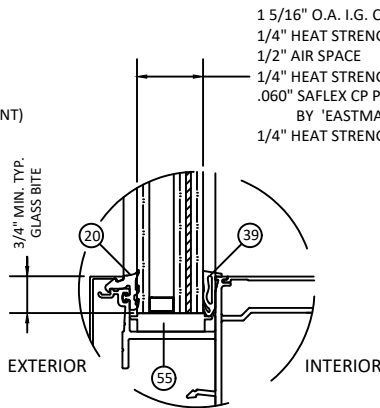
GLASS LOAD CAPACITY (PSF)			
NOMINAL DIMS.		GLASS TYPES 'CC 0.060 INTERLAYER', 'DD' & 'EE'	GLASS TYPE 'CC 0.035 INTERLAYER'
D.L.O. WIDTH (IN)	D.L.O. HEIGHT (IN)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
27	60	120.0	70.0
33		120.0	70.0
39		120.0	70.0
45		120.0	70.0
51		120.0	70.0
57		120.0	70.0
63		108.8	60.5
69	66	100.8	51.2
27		120.0	70.0
33		120.0	70.0
39		120.0	70.0
45		120.0	70.0
51		120.0	70.0
57		120.0	70.0
63	72	108.6	63.3
69		99.3	55.4
27		120.0	70.0
33		120.0	70.0
39		120.0	70.0
45		120.0	70.0
51		120.0	70.0
57	78	120.0	70.0
63		108.6	63.3
69		99.1	57.8
27		120.0	70.0
33		120.0	70.0
39		120.0	70.0
45		120.0	70.0
51	84	120.0	70.0
57		120.0	70.0
63		108.6	63.3
69		99.1	57.8
27		120.0	70.0
33		120.0	70.0
39		120.0	70.0
45	90	120.0	70.0
51		120.0	70.0
57		120.0	70.0
63		108.6	63.3
69		99.1	57.8
27		120.0	70.0
33		120.0	70.0
39	94.5	120.0	70.0
45		120.0	70.0
51		120.0	70.0
57		120.0	70.0



GLASS TYPE 'CC'
DRY



GLASS TYPE 'DD'
DRY

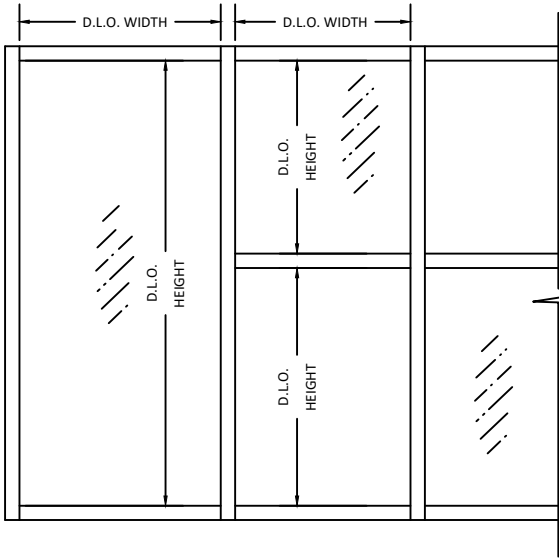
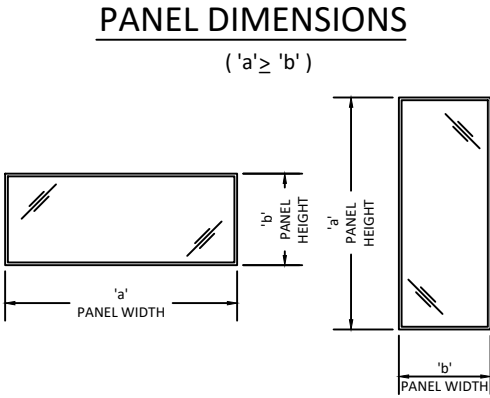


GLASS TYPE 'EE'
DRY

D.L.O. WIDTH = PANEL WIDTH - 3"
D.L.O. HEIGHT = PANEL HEIGHT - 6"

1/2" AIR SPACE CONSISTING OF :
- SPACER: ALUMINUM BOX SPACER.
- PRIMARY SEALANT: POLYISOBUTYLENE (PIB).
- SECONDARY SEALANT: STRUCTURAL SILICONE
INTENDED FOR FABRICATION OF INSULATING
GLASS UNITS.

- * NOTE:
- GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300 (3 SEC. GUSTS) AND CHAPTER 17 OF THE CURRENT FBC FOR SIZES OTHER THAN TESTED.
 - SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN CHAPTER 24.
 - SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER CHAPTER 24.
 - D.L.O. MAY NOT EXCEED MAX DIMENSIONS IN GLASS CHARTS FOR GLASS TYPE.



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

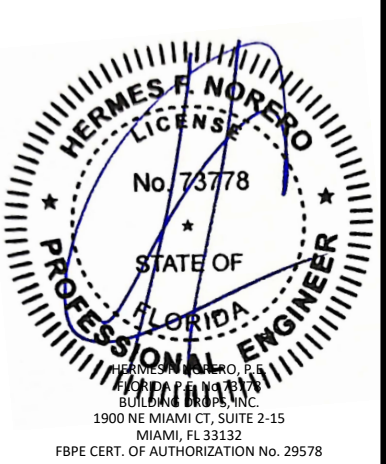
TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

GLAZING DETAILS

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:

FL14217

DATE:

07.31.17

DWG. BY:

AR/RV

CHK. BY:

HFN

SCALE:

NTS

DWG. #:

YKK211

SECTION

6.3

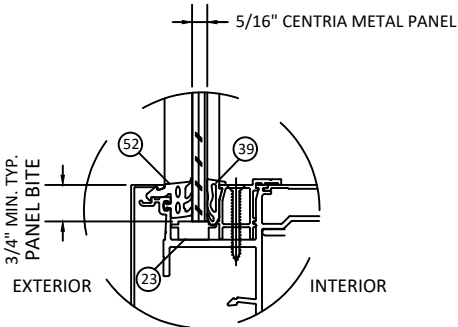
[Page 22 of 48]

c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229\1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvha\ykk 211 - fl14217 dwgs 5 & 6 - door & glazing dtls.dwg 6/2/2026 11:55 AM

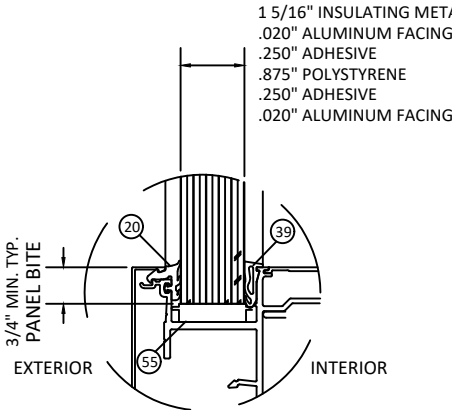
PANEL LOAD CAPACITY (PSF)			
NOMINAL DIMS.		PANEL TYPE 'A' & 'B'	PANEL TYPE 'C'
OPENING WIDTH (IN)	OPENING HEIGHT (IN)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
27	60	120.0	120.0
33		120.0	120.0
39		120.0	120.0
45		120.0	120.0
52		120.0	120.0
57		120.0	109.5
63	66	108.8	-
69		100.8	-
27		120.0	120.0
33		120.0	120.0
39		120.0	120.0
45		120.0	120.0
52	72	120.0	120.0
57		120.0	-
63		108.6	-
69		99.3	-
27		120.0	120.0
33		120.0	120.0
39	78	120.0	120.0
45		120.0	120.0
52		120.0	-
57		120.0	-
63		108.6	-
69		99.1	-
27	84	120.0	120.0
33		120.0	120.0
39		120.0	120.0
45		120.0	-
52		120.0	-
57		120.0	-
63	90	108.6	-
27		120.0	120.0
33		120.0	120.0
39		120.0	120.0
45		120.0	-
52		120.0	-
57	94.5	120.0	-
27		120.0	120.0
33		120.0	120.0
39		120.0	120.0
45		120.0	-
52		120.0	-
57		120.0	-

PANEL CAPACITY (SMI)

- NOTES
- CHART VALUES PROVIDE MAXIMUM DESIGN PRESSURES ACCORDING TO CH. 17 OF THE FBC FOR SIZES OTHER THAN TESTED
 - DO NOT EXCEED MULLION CAPACITY SELECTED OR ANCHOR CAPACITY IN DESIGN PRESSURE CHARTS



PANEL TYPE 'A'
S.M.I. - DRY

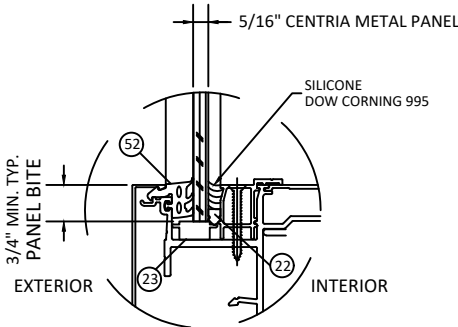


PANEL TYPE 'C'
L.M.I./S.M.I. - DRY

- * NOTE:
- PANEL CAPACITIES ON THIS SHEET ARE BASED ON CHAPTER 17 OF THE CURRENT FBC FOR SIZES OTHER THAN TESTED.
 - SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN CHAPTER 24.
 - SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR PANEL WIDER THAN 36" AS PER CHAPTER 24.
 - PANEL OPENING MAY NOT EXCEED MAX DIMENSIONS IN PANEL CHARTS FOR PANEL TYPE.

PANEL CAPACITY (LMI)

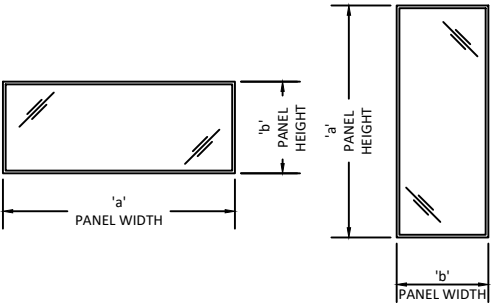
- NOTES
- CHART VALUES PROVIDE MAXIMUM DESIGN PRESSURES ACCORDING TO CH. 17 OF THE FBC FOR SIZES OTHER THAN TESTED
 - DO NOT EXCEED MULLION CAPACITY SELECTED OR ANCHOR CAPACITY IN DESIGN PRESSURE CHARTS



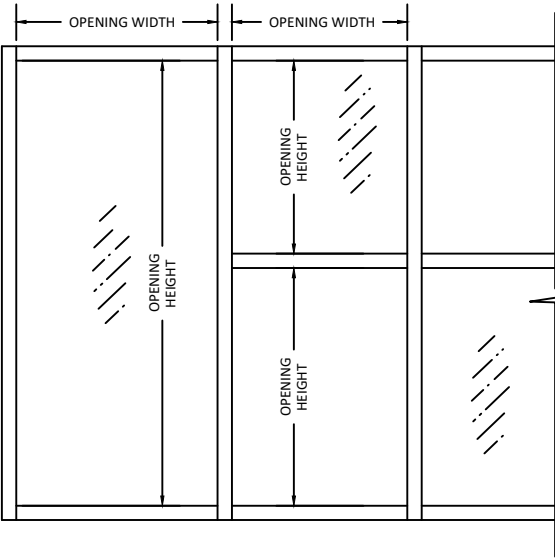
PANEL TYPE 'B'
L.M.I. - WET

PANEL DIMENSIONS

('a' ≥ 'b')



OPENING WIDTH = PANEL WIDTH - 3"
OPENING HEIGHT = PANEL HEIGHT - 6"



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

GLAZING DETAILS

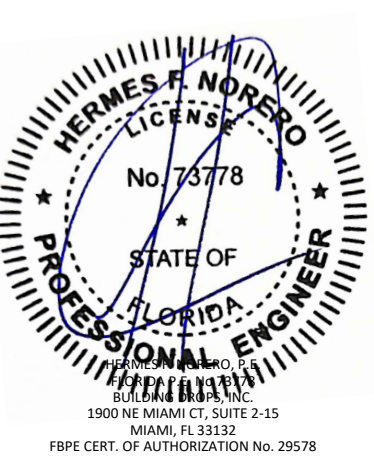
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: 07.31.17

DWG. BY: AR/RV
CHK. BY: HFN

SCALE: NTS

DWG. #: YKK211

SECTION

6.4

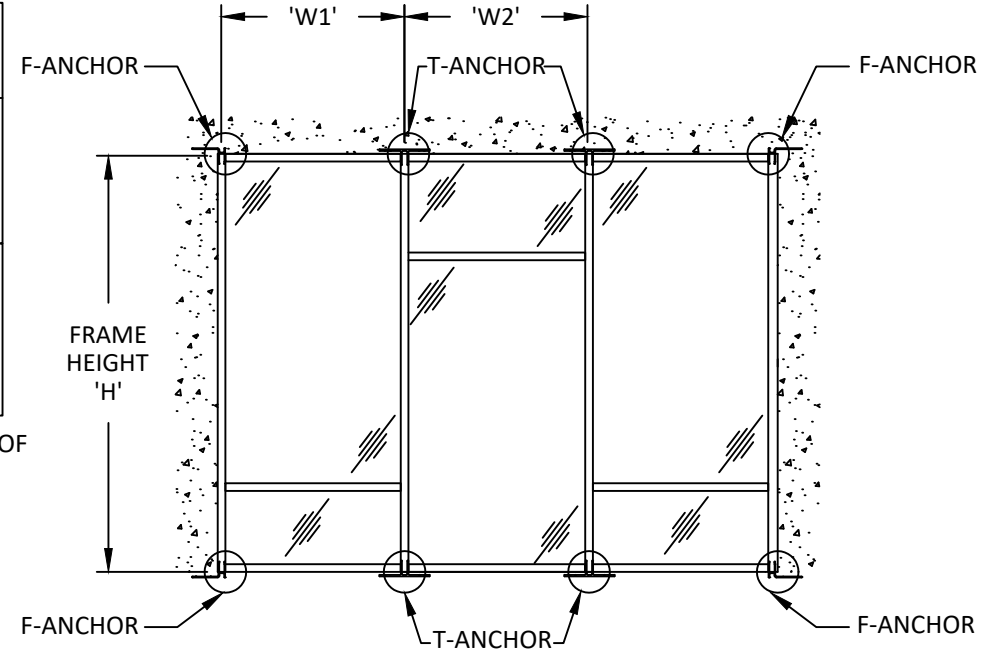
F, T & S ANCHOR TYPES

TYPE	DIAMETER	ANCHOR TYPE	SUBSTRATE	MINIMUM EDGE DISTANCE	MINIMUM EMBEDMENT
A	1/2"	HILTI KWIK BOLT TZ	MIN. 3000 PSI CONCRETE 'UNCRACKED'	3 1/4"	3 5/8"
			MIN. 3000 PSI CONCRETE 'CRACKED OR UNCRACKED'	4 1/2"	
			MIN. 4000 PSI CONCRETE 'UNCRACKED'	3 1/4"	
			MIN. 4000 PSI CONCRETE 'CRACKED OR UNCRACKED'	3 3/4"	
B	1/2"	HILTI HAS + HIT HY200 ADHESIVE ANCHOR	MIN. 4000 PSI CONCRETE 'CRACKED OR UNCRACKED'	5"	5"
C	1/2"	DEWALT SCREW-BOLT+	MIN. 3000 PSI CONCRETE 'UNCRACKED'	5"	4 1/4"
			MIN. 3000 PSI CONCRETE 'CRACKED OR UNCRACKED'	6 3/8"	
D	1/2"	ASTM A325 OR SAE GR. 5 THREADED BOLT WITH NUT & WASHER OR DRILL & TAP, OR DEWALT TAP-FLEX GR. 5 SELF TAPPING BOLT	MIN. 1/4" THICK, A36 STEEL	3/4"	MIN. 3 THREADS PENETRATION BEYOND STEEL STRUCTURE OR NUT
E	1/2"	SIMPSON TITEN HD	MIN. 4000 PSI CONCRETE 'UNCRACKED'	3 5/8"	4"
F	1/2"	HILTI KWIK BOLT TZ2	MIN. 4000 PSI CONCRETE 'UNCRACKED'	4"	3 1/4"
G	1/2"	SELF-TAPPING OR THREADED BOLT, MIN. SAE GR. 5 OR ASTM A325	MIN. 3/16" THICK A36 STEEL	3/4"	- FOR SELF-TAPPING OR DRILL & TAPPED HOLES, MIN. 3 THREADS PENETRATION BEYOND STEEL STRUCTURE. - FOR STANDARD DRILLED HOLES, PENETRATION TO BE SUFFICIENT TO MAINTAIN FULL ENGAGEMENT WITH NUT & WASHER
H	3/8"	SIMPSON TITEN HD	MIN. 4000 PSI CONCRETE 'CRACKED OR UNCRACKED'	3 5/8"	3 1/4"
I	3/8"	HILTI KWIK BOLT TZ2	MIN. 4000 PSI CONCRETE 'UNCRACKED'	4"	2 5/16"
J	5/16"	DEWALT DRIL-FLEX OR HILTI KWIK-FLEX SELF-DRILLING	MIN. 16 GAUGE STEEL, MIN. Fy = 33KSI	3/4"	MIN. 3 THREADS PENETRATION BEYOND STEEL STRUCTURE
K	#14	DEWALT CRETE FLEX SS4	MIN. 3500 PSI CONCRETE 'UNCRACKED'	1 3/4"	1 3/4"
	1/4"	DEWALT ULTRAACON+	MIN. 4000 PSI CONCRETE	1 1/2"	1 3/4"
L	1/4"	HILTI KWIK-CONII+	MIN. 2000 PSI CONCRETE UNCRACKED	1 3/4"	1 3/4"
M	M12	HALFEN TEE-BOLT GR. 8.8 FOR USE WITH HT3512 & HT6112 HALFEN CAST IN CHANNELS	MIN. 4000 PSI CONCRETE 'CRACKED OR UNCRACKED'	3"	PER HALFEN'S SPECIFICATIONS HT3512 = 3 1/8" HT6112 = 6 3/8"
N	3/8"	DEWALT SCREW-BOLT+	MIN 3000 PSI CONCRETE	3 7/8"	2 1/2"
O	#14	WOOD SCREW	WOOD (MIN SG. = 0.55)	1"	1 1/4"
	1/4"	GR 5 SM SCREW			
	1/4"	DEWALT ULTAACON+			

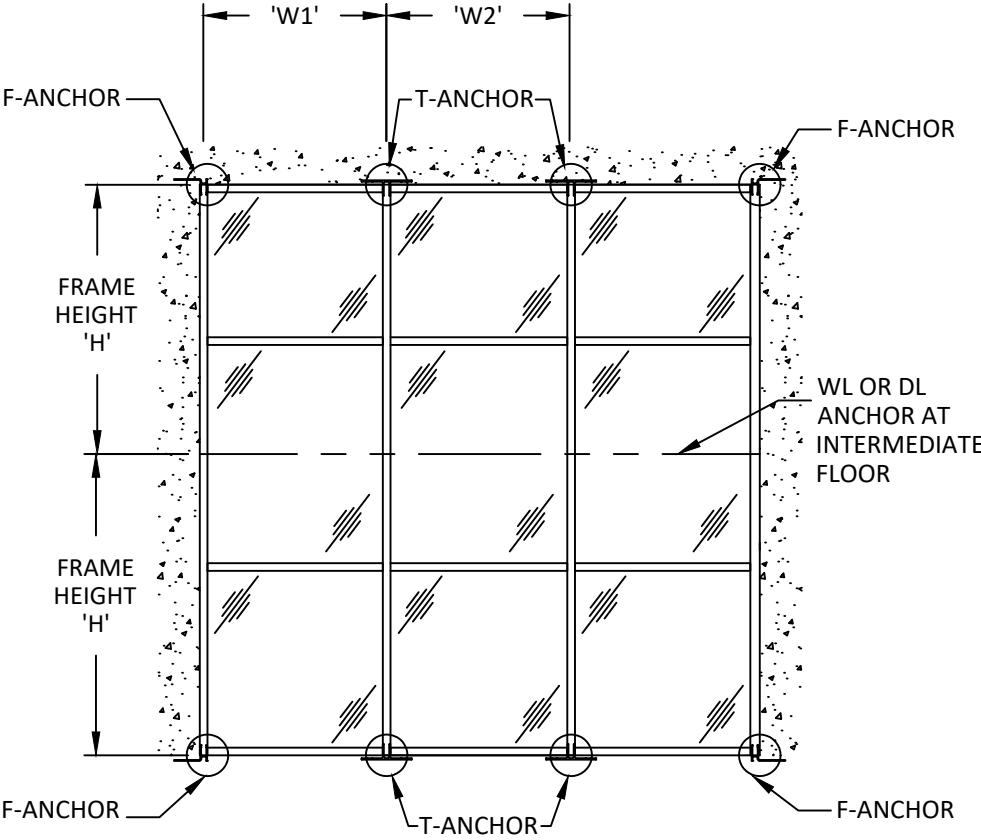
MULLION SPACING OR BAY WIDTH, 'W', FOR T-ANCHORS	$W = \frac{W1 + W2}{2}$
MULLION SPACING OR BAY WIDTH, 'W', FOR F-ANCHORS AT JAMBS	$W = W1$
MULLION SPACING OR BAY WIDTH, 'W', FOR F-ANCHORS AT VERTICAL MULL WITH DOORS	$*W = \frac{W1 + W2}{2}$

*REFER TO SECTION 2 FOR ILLUSTRATION OF DETERMINING MAX. TRIBUTARY WIDTH

- NOTE:
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - REFER TO ANCHOR LAYOUTS AT RIGHT FOR LOCATIONS AND DETERMINING MAX. FRAME HEIGHT (H) AND TRIBUTARY WIDTHS (W).
 - FOR SITE CONDITIONS NOT SHOWN IN THE DETAILS HEREIN OR EDGE DISTANCE REQUIREMENTS TO BE MODIFIED, ANCHORS MAY BE ENGINEERED ON A SITE SPECIFIC BASIS.
 - REFER TO SECTION 7 FOR ANCHOR CONFIGURATIONS.
 - REFER TO SECTION 7 FOR T, F, & S ANCHOR TYPE CAPACITIES.
 - FOR ANCHOR TYPE 'M', FINAL SELECTION OF HALFEN CAST IN CHANNEL & T-BOLTS SHALL BE VERIFIED BY HALFEN USA IN ACCORDANCE WITH SITE SPECIFIC LOADS PRIOR TO INSTALLATION.



SINGLE SPAN ANCHOR LAYOUT



TWIN SPAN ANCHOR LAYOUT - TYP.



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

F, T & S - ANCHOR DETAILS

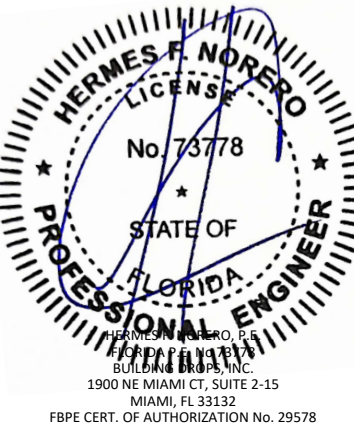
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **YKK211**

SECTION

7.0

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

G CURTAIN WALL SYSTEM (HVHZ) (IMPACT)

F & T - ANCHOR DETAILS

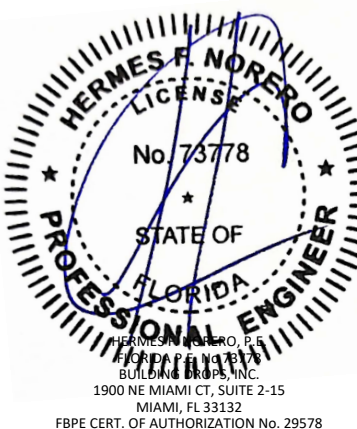
PREPARED BY: BUILDING DROPS, INC.

900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.20

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERAL IN NATURE AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL #: **FL14217**

DATE: 07.31.17

DWG. BY: AR/RV	CHK. BY: HFN
--------------------------	------------------------

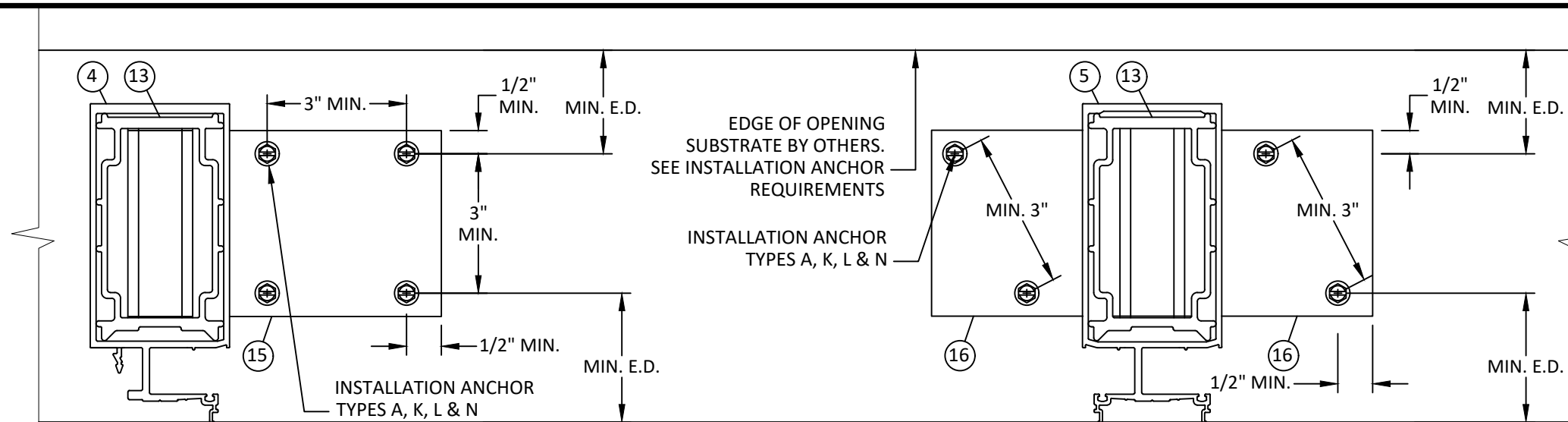
SCALE: NTS

DWG. #: YKK211

SECTION

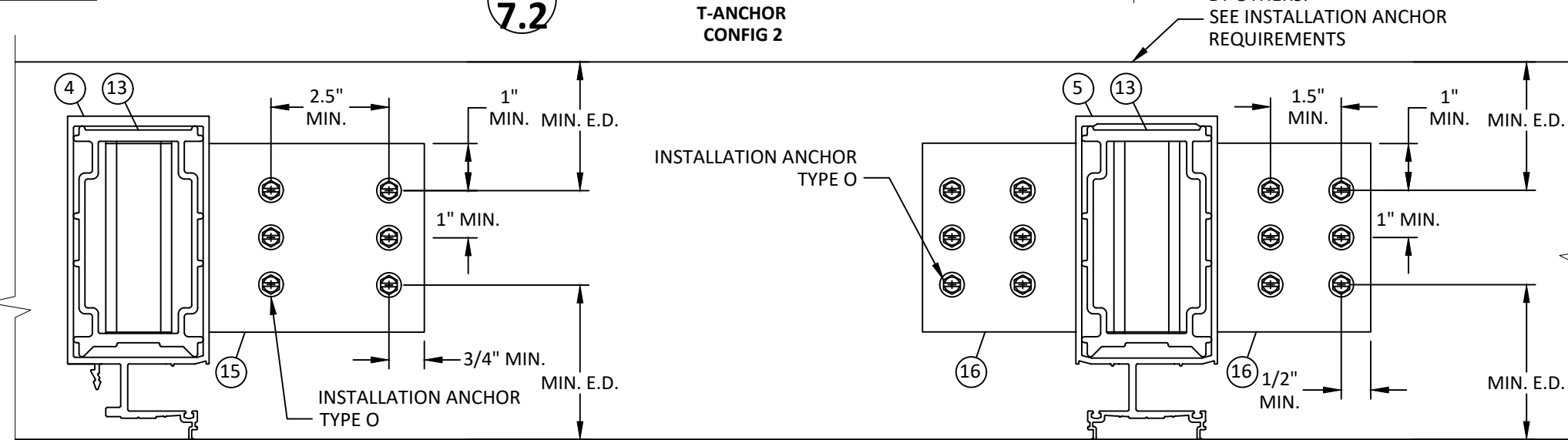
7.2

[Page 26 of 48]



3 HORIZONTAL SECTION

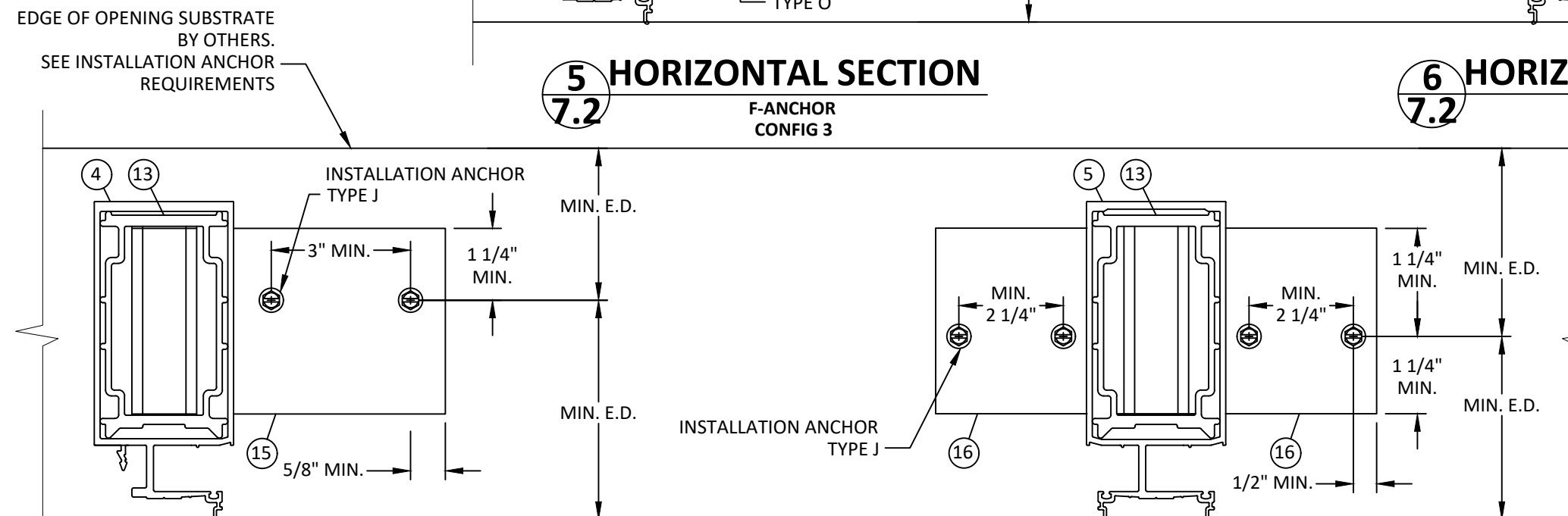
4 HORIZONTAL SECTION



5 HORIZONTAL SECTION

7.2 F-ANCHOR CONFIG 3

6 HORIZONTAL SECTION



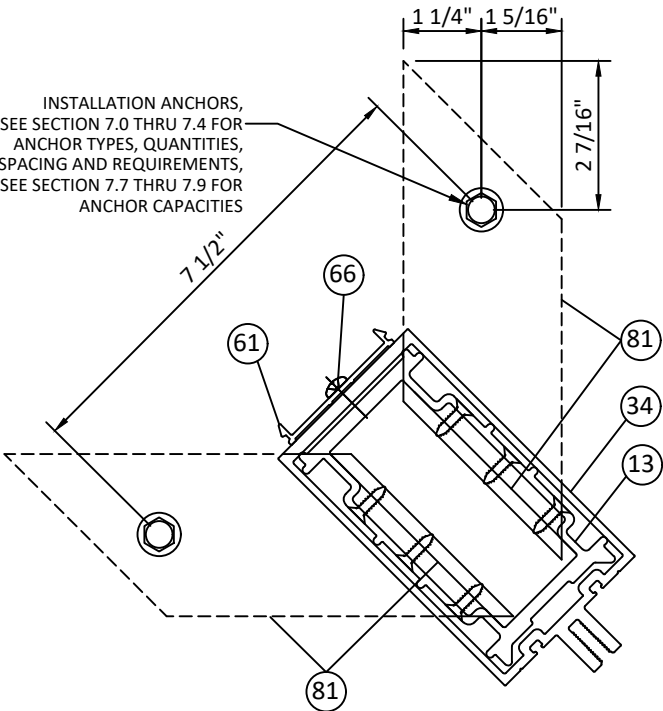
7.2 HORIZONTAL SECTION

8 HORIZONTAL SECTION

7.2 T-ANCHOR CONFIG 7

FL #:	
FL14217	
DATE: 07.31.17	
DWG. BY: AR/RV	CHK. BY: HFN
SCALE: NTS	
DWG. #: YKK211	
SECTION	
7.4	
[Page 28 of 48]	

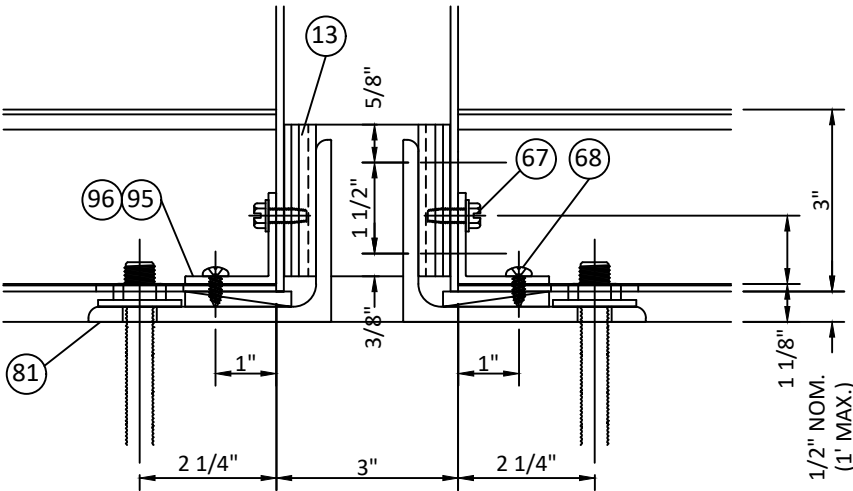
c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229\1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvba\ykk 211 - fl14217.dwg 7 - ft s anchor dtls.dwg 6/2/2026 11:55 AM



STANDARD MEMBER SHOWN

13
7.5 **HORIZONTAL SECTION**
CORNER MULLION ANCHOR

ANCHORAGE DETAILS ALSO
APPLY FOR INSULATING GLASS
EXTRUSIONS. REFER TO
SECTIONS 3 & 4 FOR DETAILS.



CORNER MULLION ANCHORS
FRONT VIEW



Quality
inspires[™]

YKK AP AMERICA, Inc.

1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

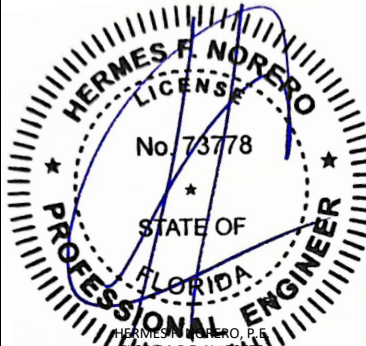
TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)
F & T - ANCHOR DETAILS

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

HERMES F. NORERO, P.E.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL14217

DATE:

07.31.17

DWG. BY:

CHK. BY:

AR/RV

HFN

SCALE:

NTS

DWG. #:

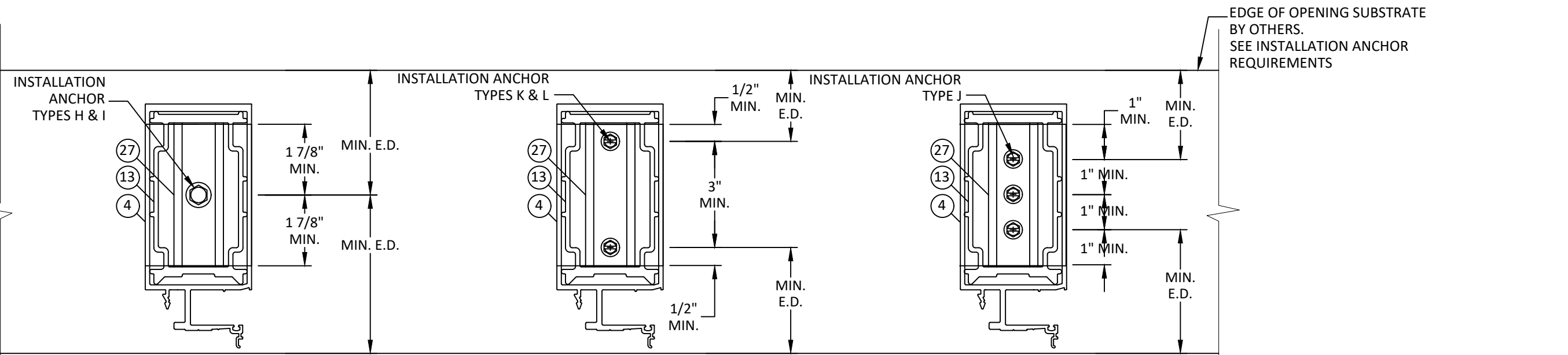
YKK211

SECTION

7.5

[Page 29 of 48]

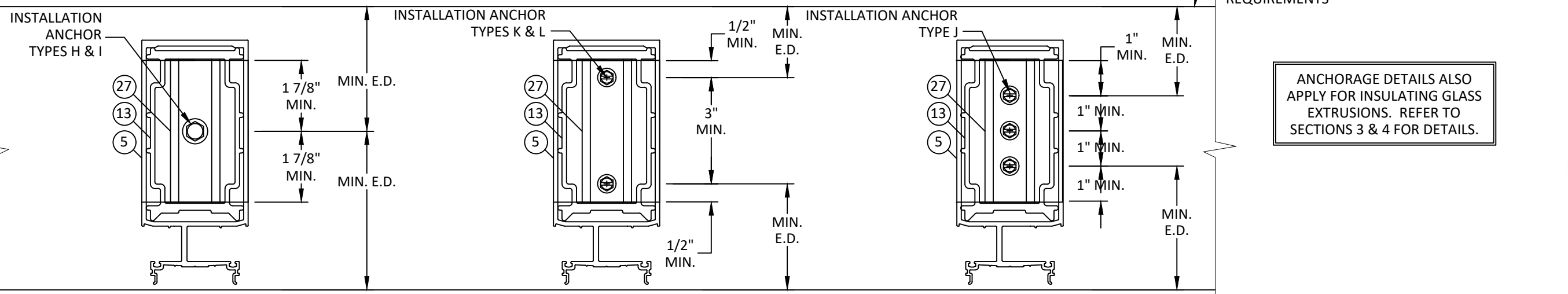
c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229-1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvh\ykk 211 - fl14217.dwg 7 - ft s anchor dfls.dwg 6/2/2026 11:55 AM



14 HORIZONTAL SECTION
7.6 S-ANCHOR CONFIG 4

15 HORIZONTAL SECTION
7.6 S-ANCHOR CONFIG 5

16 HORIZONTAL SECTION
7.6 S-ANCHOR CONFIG 6



14A HORIZONTAL SECTION
7.6 S-ANCHOR CONFIG 4

15A HORIZONTAL SECTION
7.6 S-ANCHOR CONFIG 5

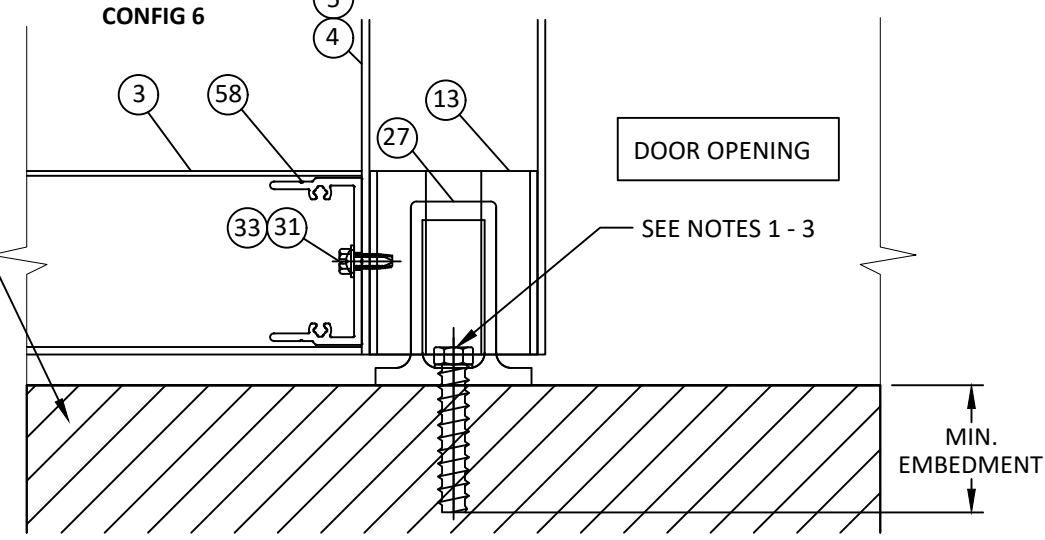
16A HORIZONTAL SECTION
7.6 S-ANCHOR CONFIG 6

NOTE:

1. ANCHORS SHOWN HEREIN ARE FOR ILLUSTRATION PURPOSES ONLY. ACTUAL ANCHOR IDENTIFICATION SHALL BE PER ANCHOR MANUFACTURERS INSTALLATION INSTRUCTIONS
2. REFER TO INSTALLATION ANCHOR REQUIREMENTS FOR MINIMUM EDGE DISTANCES (E.D.), EMBEDMENTS (EMBED), & PROPERTIES OF OPENING SUBSTRATE.
3. ALTERNATIVELY, F-ANCHORS MAY BE USED IN LIEU OF S-ANCHORS AT DOOR JAMB TO SIDELITE LOCATIONS. REFER TO SECTION 7.1-7.4 FOR DETAILS & SECTION 7.8 FOR F-ANCHOR CAPACITIES.

CONCRETE, WOOD OR STEEL SUBSTRATE BY OTHERS. SEE INSTALLATION ANCHOR REQUIREMENTS

EXTERIOR VIEW
S-ANCHOR (TYPICAL)



ANCHORAGE DETAILS ALSO APPLY FOR INSULATING GLASS EXTRUSIONS. REFER TO SECTIONS 3 & 4 FOR DETAILS.

YKK AP Quality inspires™

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE: YHC 300 IG CURTAIN WALL SYSTEM (HVHZ) (IMPACT)

S - ANCHOR DETAILS

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT

HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL14217

DATE: **07.31.17**

DWG. BY:	CHK. BY:
AR/RV	HFN

SCALE: **NTS**

DWG. #: **YKK211**

SECTION

7.6

[Page 30 of 48]

SINGLE SPAN & MULTI SPAN - F & T ANCHOR CAPACITIES

MAX. ANCHOR CAPACITY - DESIGN PRESSURES (+/- PSF)																
MAX. AVG. WIDTH 'W' (in.)	MAX. SPAN 'H' (in.)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
36	78	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
66		125.9	130.0	130.0	130.0	130.0	130.0	130.0	130.0	125.9	130.0	130.0	125.9	130.0	125.9	125.9
72		115.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	115.4	130.0	130.0	115.4	130.0	115.4	115.4
36	84	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60		128.6	130.0	130.0	130.0	130.0	130.0	130.0	130.0	128.6	130.0	130.0	128.6	130.0	128.6	128.6
66		116.9	130.0	130.0	130.0	130.0	130.0	130.0	130.0	116.9	130.0	130.0	116.9	130.0	116.9	116.9
72		107.1	130.0	130.0	130.0	130.0	130.0	130.0	129.0	107.1	130.0	130.0	107.1	130.0	107.1	107.1
36	90	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60		120.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	120.0	130.0	130.0	120.0	130.0	120.0	120.0
66		109.1	130.0	130.0	130.0	130.0	130.0	130.0	130.0	109.1	130.0	130.0	109.1	130.0	109.1	109.1
72		100.0	130.0	125.0	130.0	130.0	130.0	130.0	120.4	100.0	130.0	130.0	100.0	130.0	100.0	100.0
36	96	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54		125.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	125.0	130.0	130.0	125.0	130.0	125.0	125.0
60		112.5	130.0	130.0	130.0	130.0	130.0	130.0	130.0	112.5	130.0	130.0	112.5	130.0	112.5	112.5
66		102.3	130.0	127.8	130.0	130.0	130.0	130.0	123.1	102.3	130.0	130.0	102.3	130.0	102.3	102.3
72		93.8	130.0	117.2	130.0	130.0	130.0	130.0	112.9	93.8	130.0	130.0	93.8	130.0	93.8	93.8
36	102	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54		117.6	130.0	130.0	130.0	130.0	130.0	130.0	117.6	130.0	130.0	130.0	117.6	130.0	117.6	117.6
60		105.9	130.0	130.0	130.0	130.0	130.0	130.0	127.5	105.9	130.0	130.0	105.9	130.0	105.9	105.9
66		96.3	130.0	120.3	130.0	130.0	130.0	130.0	115.9	96.3	130.0	130.0	96.3	130.0	96.3	96.3
72		88.2	130.0	110.3	130.0	130.0	130.0	130.0	106.2	88.2	130.0	130.0	88.2	130.0	88.2	88.2
36	108	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48		125.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	125.0	130.0	130.0	125.0	130.0	125.0	125.0
54		111.1	130.0	130.0	130.0	130.0	130.0	130.0	111.1	130.0	130.0	130.0	111.1	130.0	111.1	111.1
60		100.0	130.0	125.0	130.0	130.0	130.0	130.0	120.4	100.0	130.0	130.0	100.0	130.0	100.0	100.0
66		90.9	130.0	113.6	130.0	130.0	130.0	130.0	109.5	90.9	130.0	130.0	90.9	130.0	90.9	90.9
72		83.3	130.0	104.2	130.0	130.0	130.0	129.2	100.3	83.3	129.2	129.2	83.3	130.0	83.3	83.3
36	114	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48		118.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	118.4	130.0	130.0	118.4	130.0	118.4	118.4
54		105.3	130.0	130.0	130.0	130.0	130.0	130.0	126.7	105.3	130.0	130.0	105.3	130.0	105.3	105.3
60		94.7	130.0	118.4	130.0	130.0	130.0	130.0	114.1	94.7	130.0	130.0	94.7	130.0	94.7	94.7
66		86.1	130.0	107.7	130.0	130.0	130.0	130.0	103.7	86.1	130.0	130.0	86.1	130.0	86.1	86.1
72		78.9	130.0	98.7	130.0	130.0	130.0	122.4	95.1	78.9	122.4	122.4	78.9	130.0	78.9	78.9
36	120	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42		128.6	130.0	130.0	130.0	130.0	130.0	130.0	130.0	128.6	130.0	130.0	128.6	130.0	128.6	128.6
48		112.5	130.0	130.0	130.0	130.0	130.0	130.0	130.0	112.5	130.0	130.0	112.5	130.0	112.5	112.5
54		100.0	130.0	125.0	130.0	130.0	130.0	130.0	120.4	100.0	130.0	130.0	100.0	130.0	100.0	100.0
60		90.0	130.0	112.5	130.0	130.0	130.0	130.0	108.4	90.0	130.0	130.0	90.0	130.0	90.0	90.0
66		81.8	130.0	102.3	130.0	130.0	130.0	126.8	98.5	81.8	126.8	126.8	81.8	130.0	81.8	81.8
72		75.0	130.0	93.8	130.0	130.0	130.0	116.3	90.3	75.0	116.3	116.3	75.0	130.0	75.0	75.0

NOTE:
1. REFER TO SECTION 7.0 THRU 7.6 FOR DETAILS OF ANCHOR REQUIREMENTS. AND DETERMINING MAX. SPAN 'H'
AND TRIBUTARY WIDTHS 'W'

MAX. ANCHOR CAPACITY - DESIGN PRESSURES (+/- PSF)																	
MAX. AVG. WIDTH 'W' (in.)	MAX. SPAN 'H' (in.)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
36	126	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	
42		122.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	122.4	130.0	130.0	122.4	130.0	122.4	122.4	
48		107.1	130.0	130.0	130.0	130.0	130.0	130.0	130.0	129.0	107.1	130.0	130.0	107.1	130.0	107.1	
54		95.2	130.0	119.0	130.0	130.0	130.0	130.0	130.0	114.7	95.2	130.0	130.0	95.2	130.0	95.2	
60		85.7	130.0	107.1	130.0	130.0	130.0	130.0	130.0	103.2	85.7	130.0	130.0	85.7	130.0	85.7	
66		77.9	130.0	97.4	130.0	130.0	130.0	130.0	120.8	93.8	77.9	120.8	120.8	77.9	130.0	77.9	77.9
69	132	74.5	130.0	93.2	130.0	130.0	130.0	115.5	89.7	74.5	115.5	115.5	74.5	130.0	74.5	74.5	
36		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	
42		116.9	130.0	130.0	130.0	130.0	130.0	130.0	130.0	116.9	130.0	130.0	116.9	130.0	116.9	116.9	
48		102.3	130.0	127.8	130.0	130.0	130.0	130.0	123.1	102.3	130.0	130.0	102.3	130.0	102.3	102.3	
54		90.9	130.0	113.6	130.0	130.0	130.0	130.0	109.5	90.9	130.0	130.0	90.9	130.0	90.9	90.9	
60		81.8	130.0	102.3	130.0	130.0	130.0	130.0	126.8	98.5	81.8	126.8	126.8	81.8	130.0	81.8	81.8
66	138	74.4	130.0	93.0	130.0	130.0	130.0	115.3	89.6	74.4	115.3	115.3	74.4	130.0	74.4	74.4	
36		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	
42		111.8	130.0	130.0	130.0	130.0	130.0	130.0	130.0	111.8	130.0	130.0	111.8	130.0	111.8	111.8	
48		97.8	130.0	122.3	130.0	130.0	130.0	130.0	117.8	97.8	130.0	130.0	97.8	130.0	97.8	97.8	
54		87.0	130.0	108.7	130.0	130.0	130.0	130.0	104.7	87.0	130.0	130.0	87.0	130.0	87.0	87.0	
60		78.3	130.0	97.8	130.0	130.0	130.0	130.0	121.3	94.2	78.3	121.3	121.3	78.3	130.0	78.3	78.3
63	144	74.5	130.0	93.2	130.0	130.0	130.0	115.5	89.7	74.5	115.5	115.5	74.5	130.0	74.5	74.5	
36		125.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	125.0	130.0	130.0	125.0	130.0	125.0	125.0	
42		107.1	130.0	130.0	130.0	130.0	130.0	130.0	129.0	107.1	130.0	130.0	107.1	130.0	107.1	107.1	
48		93.8	130.0	117.2	130.0	130.0	130.0	130.0	112.9	93.8	130.0	130.0	93.8	130.0	93.8	93.8	
54		83.3	130.0	104.2	130.0	130.0	130.0	130.0	129.2	100.3	83.3	129.2	129.2	83.3	130.0	83.3	83.3
60		75.0	130.0	93.8	130.0	130.0	130.0	130.0	116.3	90.3	75.0	116.3	116.3	75.0	130.0	75.0	75.0
36	150	120.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	120.0	130.0	130.0	120.0	130.0	120.0	120.0	
42		102.9	130.0	128.6	130.0	130.0	130.0	130.0	123.8	102.9	130.0	130.0	102.9	130.0	102.9	102.9	
48		90.0	130.0	112.5	130.0	130.0	130.0	130.0	108.4	90.0	130.0	130.0	90.0	130.0	90.0	90.0	
54		80.0	130.0	100.0	130.0	130.0	130.0	130.0	124.0	96.3	80.0	124.0	124.0	80.0	130.0	80.0	80.0
60		72.0	130.0	90.0	130.0	130.0	130.0	130.0	111.6	86.7	72.0	111.6	111.6	72.0	130.0	72.0	72.0

SINGLE SPAN & MULTI SPAN

F ANCHOR CAPACITIES WHEN USED AT DOOR JAMB TO SIDELITE LOCATIONS

MAX. ANCHOR CAPACITY - DESIGN PRESSURES (+/- PSF)																
MAX. AVG. WIDTH 'W' (in.)	MAX. SPAN 'H' (in.)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
36	78	115.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	115.4	130.0	130.0	115.4	130.0	115.4	115.4
42		98.9	130.0	123.6	130.0	130.0	130.0	130.0	119.1	98.9	130.0	130.0	98.9	130.0	98.9	98.9
48		86.5	130.0	108.2	130.0	130.0	130.0	130.0	104.2	86.5	130.0	130.0	86.5	130.0	86.5	86.5
54		76.9	130.0	96.2	130.0	130.0	130.0	119.2	92.6	76.9	119.2	119.2	76.9	130.0	76.9	76.9
60		69.2	125.0	86.5	125.0	125.0	125.0	107.3	83.4	69.2	107.3	107.3	69.2	125.0	69.2	69.2
66		62.9	113.7	78.7	113.6	113.7	113.7	97.6	75.8	62.9	97.6	97.6	62.9	113.7	62.9	62.9
72		57.7	104.2	72.1	104.2	104.2	104.2	89.4	69.5	57.7	89.4	89.4	57.7	104.2	57.7	57.7
36	84	107.1	130.0	130.0	130.0	130.0	130.0	130.0	129.0	107.1	130.0	130.0	107.1	130.0	107.1	107.1
42		91.8	130.0	114.8	130.0	130.0	130.0	130.0	110.6	91.8	130.0	130.0	91.8	130.0	91.8	91.8
48		80.4	130.0	100.4	130.0	130.0	130.0	124.6	96.8	80.4	124.6	124.6	80.4	130.0	80.4	80.4
54		71.4	129.0	89.3	129.0	129.0	129.0	110.7	86.0	71.4	110.7	110.7	71.4	129.0	71.4	71.4
60		64.3	116.1	80.4	116.1	116.1	116.1	99.6	77.4	64.3	99.6	99.6	64.3	116.1	64.3	64.3
66		58.4	105.6	73.1	105.5	105.5	105.6	90.6	70.4	58.4	90.6	90.6	58.4	105.6	58.4	58.4
72		53.6	96.8	67.0	96.7	96.7	96.8	83.0	64.5	53.6	83.0	83.0	53.6	96.8	53.6	53.6
36	90	100.0	130.0	125.0	130.0	130.0	130.0	130.0	120.4	100.0	130.0	130.0	100.0	130.0	100.0	100.0
42		85.7	130.0	107.1	130.0	130.0	130.0	130.0	103.2	85.7	130.0	130.0	85.7	130.0	85.7	85.7
48		75.0	130.0	93.8	130.0	130.0	130.0	116.3	90.3	75.0	116.3	116.3	75.0	130.0	75.0	75.0
54		66.7	120.4	83.3	120.4	120.4	120.4	103.3	80.3	66.7	103.3	103.3	66.7	120.4	66.7	66.7
60		60.0	108.4	75.0	108.3	108.3	108.4	93.0	72.2	60.0	93.0	93.0	60.0	108.4	60.0	60.0
66		54.5	98.5	68.2	98.5	98.5	98.5	84.5	65.7	54.5	84.5	84.5	54.5	98.5	54.5	54.5
72		50.0	90.3	62.5	90.3	90.3	90.3	77.5	60.2	50.0	77.5	77.5	50.0	90.3	50.0	50.0
36	96	93.8	130.0	117.2	130.0	130.0	130.0	130.0	112.9	93.8	130.0	130.0	93.8	130.0	93.8	93.8
42		80.4	130.0	100.4	130.0	130.0	130.0	124.6	96.8	80.4	124.6	124.6	80.4	130.0	80.4	80.4
48		70.3	127.0	87.9	127.0	127.0	127.0	109.0	84.7	70.3	109.0	109.0	70.3	127.0	70.3	70.3
54		62.5	112.9	78.1	112.8	112.9	112.9	96.9	75.3	62.5	96.9	96.9	62.5	112.9	62.5	62.5
60		56.3	101.6	70.3	101.6	101.6	101.6	87.2	67.7	56.3	87.2	87.2	56.3	101.6	56.3	56.3
66		51.1	92.4	63.9	92.3	92.3	92.4	79.3	61.6	51.1	79.3	79.3	51.1	92.4	51.1	51.1
72		46.9	84.7	58.6	84.6	84.6	84.7	72.7	56.4	46.9	72.7	72.7	46.9	84.7	46.9	46.9
36	102	88.2	130.0	110.3	130.0	130.0	130.0	130.0	106.2	88.2	130.0	130.0	88.2	130.0	88.2	88.2
42		75.6	130.0	94.5	130.0	130.0	130.0	117.2	91.1	75.6	117.2	117.2	75.6	130.0	75.6	75.6
48		66.2	119.5	82.7	119.5	119.5	119.5	102.6	79.7	66.2	102.6	102.6	66.2	119.5	66.2	66.2
54		58.8	106.2	73.5	106.2	106.2	106.2	91.2	70.8	58.8	91.2	91.2	58.8	106.2	58.8	58.8
60		52.9	95.6	66.2	95.6	95.6	95.6	82.1	63.7	52.9	82.1	82.1	52.9	95.6	52.9	52.9
66		48.1	86.9	60.2	86.9	86.9	86.9	74.6	57.9	48.1	74.6	74.6	48.1	86.9	48.1	48.1
72		44.1	79.7	55.1	79.7	79.7	79.7	68.4	53.1	44.1	68.4	68.4	44.1	79.7	44.1	44.1
36	108	83.3	130.0	104.2	130.0	130.0	130.0	129.2	100.3	83.3	129.2	129.2	83.3	130.0	83.3	83.3
42		71.4	129.0	89.3	129.0	129.0	129.0	110.7	86.0	71.4	110.7	110.7	71.4	129.0	71.4	71.4
48		62.5	112.9	78.1	112.8	112.9	112.9	96.9	75.3	62.5	96.9	96.9	62.5	112.9	62.5	62.5
54		55.6	100.3	69.4	100.3	100.3	100.3	86.1	66.9	55.6	86.1	86.1	55.6	100.3	55.6	55.6
60		50.0	90.3	62.5	90.3	90.3	90.3	77.5	60.2	50.0	77.5	77.5	50.0	90.3	50.0	50.0
66		45.5	82.1	56.8	82.1	82.1	82.1	70.5	54.7	45.5	70.5	70.5	45.5	82.1	45.5	45.5
72		41.7	75.3	52.1	75.2	75.2	75.3	64.6	50.2	41.7	64.6	64.6	41.7	75.3	41.7	41.7
36	114	78.9	130.0	98.7	130.0	130.0	130.0	122.4	95.1	78.9	122.4	122.4	78.9	130.0	78.9	78.9
42		67.7	122.2	84.6	122.2	122.2	122.2	104.9	81.5	67.7	104.9	104.9	67.7	122.2	67.7	67.7
48		59.2	106.9	74.0	106.9	106.9	106.9	91.8	71.3	59.2	91.8	91.8	59.2	106.9	59.2	59.2
54		52.6	95.1	65.8	95.0	95.0	95.1	81.6	63.4	52.6	81.6	81.6	52.6	95.1	52.6	52.6
60		47.4	85.6	59.2	85.5	85.5	85.6	73.4	57.0	47.4	73.4	73.4	47.4	85.6	47.4	47.4
66		43.1	77.8	53.8	77.8	77.8	77.8	66.7	51.8	43.1	66.7	66.7	43.1	77.8	43.1	43.1
72		39.5	71.3	49.3	71.3	71.3	71.3	61.2	47.5	39.5	61.2	61.2	39.5	71.3	39.5	39.5
36	120	75.0	130.0	93.8	130.0	130.0	130.0	116.3	90.3	75.0	116.3	116.3	75.0	130.0	75.0	75.0
42		64.3	116.1	80.4	116.1	116.1	116.1	99.6	77.4	64.3	99.6	99.6	64.3	116.1	64.3	64.3
48		56.3	101.6	70.3	101.6	101.6	101.6	87.2	67.7	56.3	87.2	87.2	56.3	101.6	56.3	56.3
54		50.0	90.3	62.5	90.3	90.3	90.3	77.5	60.2	50.0	77.5	77.5	50.0	90.3	50.0	50.0
60		45.0	81.3	56.3	81.3	81.3	81.3	69.8	54.2	45.0	69.8	69.8	45.0	81.3	45.0	45.0
66		40.9	73.9	51.1	73.9	73.9	73.9	63.4	49.3	40.9	63.4	63.4	40.9	73.9	40.9	40.9
72		37.5	67.7	46.9	67.7	67.7	67.7	58.1	45.2	37.5	58.1	58.1	37.5	67.7	37.5	37.5

- NOTE:
- REFER TO SECTION 7.0 THRU 7.6 FOR DETAILS OF ANCHOR REQUIREMENTS. AND DETERMINING MAX. SPAN 'H' AND TRIBUTARY WIDTHS 'W'
 - SEE SECTION 2, TWIN SPAN ELEVATION FOR LOCATION OF F-ANCHOR WHEN USED AT VERTICAL MULLION BETWEEN DOOR AND D.L.O.

MAX. ANCHOR CAPACITY - DESIGN PRESSURES (+/- PSF)																
MAX. AVG. WIDTH 'W' (in.)	MAX. SPAN 'H' (in.)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
36	126	71.4	129.0	89.3	129.0	129.0	129.0	110.7	86.0	71.4	110.7	110.7	71.4	129.0	71.4	71.4
42		61.2	110.6	76.5	110.5	110.6	110.6	94.9	73.7	61.2	94.9	94.9	61.2	110.6	61.2	61.2
48		53.6	96.8	67.0	96.7	96.7	96.8	83.0	64.5	53.6	83.0	83.0	53.6	96.8	53.6	53.6
54		47.6	86.0	59.5	86.0	86.0	86.0	73.8	57.3	47.6	73.8	73.8	47.6	86.0	47.6	47.6
60		42.9	77.4	53.6	77.4	77.4	77.4	66.4	51.6	42.9	66.4	66.4	42.9	77.4	42.9	42.9
66		39.0	70.4	48.7	70.3	70.4	70.4	60.4	46.9	39.0	60.4	60.4	39.0	70.4	39.0	39.0
69		37.3	67.3	46.6	67.3	67.3	67.3	57.8	44.9	37.3	57.8	57.8	37.3	67.3	37.3	37.3
36	132	68.2	123.2	85.2	123.1	123.1	123.2	105.7	82.1	68.2	105.7	105.7	68.2	123.2	68.2	68.2
42		58.4	105.6	73.1	105.5	105.5	105.6	90.6	70.4	58.4	90.6	90.6	58.4	105.6	58.4	58.4
48		51.1	92.4	63.9	92.3	92.3	92.4	79.3	61.6	51.1	79.3	79.3	51.1	92.4	51.1	51.1
54		45.5	82.1	56.8	82.1	82.1	82.1	70.5	54.7	45.5	70.5	70.5	45.5	82.1	45.5	45.5
60		40.9	73.9	51.1	73.9	73.9	73.9	63.4	49.3	40.9	63.4	63.4	40.9	73.9	40.9	40.9
66		37.2	67.2	46.5	67.1	67.2	67.2	57.6	44.8	37.2	57.6	57.6	37.2	67.2	37.2	37.2
36		138	65.2	117.8	81.5	117.8	117.8	117.8	101.1	78.5	65.2	101.1	101.1	65.2	117.8	65.2
42	55.9		101.0	69.9	100.9	100.9	101.0	86.6	67.3	55.9	86.6	86.6	55.9	101.0	55.9	55.9
48	48.9		88.3	61.1	88.3	88.3	88.3	75.8	58.9	48.9	75.8	75.8	48.9	88.3	48.9	48.9
54	43.5		78.5	54.3	78.5	78.5	78.5	67.4	52.3	43.5	67.4	67.4	43.5	78.5	43.5	43.5
60	39.1		70.7	48.9	70.7	70.7	70.7	60.7	47.1	39.1	60.7	60.7	39.1	70.7	39.1	39.1
63	37.3		67.3	46.6	67.3	67.3	67.3	57.8	44.9	37.3	57.8	57.8	37.3	67.3	37.3	37.3
36	144		62.5	112.9	78.1	112.8	112.9	112.9	96.9	75.3	62.5	96.9	96.9	62.5	112.9	62.5
42		53.6	96.8	67.0	96.7	96.7	96.8	83.0	64.5	53.6	83.0	83.0	53.6	96.8	53.6	53.6
48		46.9	84.7	58.6	84.6	84.6	84.7	72.7	56.4	46.9	72.7	72.7	46.9	84.7	46.9	46.9
54		41.7	75.3	52.1	75.2	75.2	75.3	64.6	50.2	41.7	64.6	64.6	41.7	75.3	41.7	41.7
60		37.5	67.7	46.9	67.7	67.7	67.7	58.1	45.2	37.5	58.1	58.1	37.5	67.7	37.5	37.5
36	150	60.0	108.4	75.0	108.3	108.3	108.4	93.0	72.2	60.0	93.0	93.0	60.0	108.4	60.0	60.0
42		51.4	92.9	64.3	92.9	92.9	92.9	79.7	61.9	51.4	79.7	79.7	51.4	92.9	51.4	51.4
48		45.0	81.3	56.3	81.3	81.3	81.3	69.8	54.2	45.0	69.8	69.8	45.0	81.3	45.0	45.0
54		40.0	72.2	50.0	72.2	72.2	72.2	62.0	48.2	40.0	62.0	62.0	40.0	72.2	40.0	40.0
60		36.0	65.0	45.0	65.0	65.0	65.0	55.8	43.3	36.0	55.8	55.8	36.0	65.0	36.0	36.0

c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229.1 - fbc submittal - revisions\dwgs\apc- upload\014217\hvhb\ykk 211 - fl4217.dwg 7 - ft s anchor dtls.dwg 6/2/2026 11:55 AM

SINGLE SPAN & MULTI SPAN - S ANCHOR CAPACITIES

MAX. ANCHOR CAPACITY - DESIGN PRESSURES (+/- PSF)						
MAX. AVG. WIDTH 'W' (in.)	MAX. SPAN 'H' (in.)	H	I	J	K	L
36	78	113.8	114.9	130.0	46.2	114.9
42		97.6	98.5	130.0	39.6	98.5
48		85.4	86.2	129.5	34.6	86.2
54		75.9	76.6	115.1	30.8	76.6
60		68.3	68.9	103.6	27.7	68.9
66		62.1	62.7	94.2	25.2	62.7
72		56.9	57.4	86.3	23.1	57.4
36	84	105.7	106.7	130.0	42.9	106.7
42		90.6	91.4	130.0	36.7	91.4
48		79.3	80.0	120.2	32.1	80.0
54		70.5	71.1	106.9	28.6	71.1
60		63.4	64.0	96.2	25.7	64.0
66		57.7	58.2	87.4	23.4	58.2
72		52.9	53.3	80.1	21.4	53.3
36	90	98.7	99.6	130.0	40.0	99.6
42		84.6	85.3	128.2	34.3	85.3
48		74.0	74.7	112.2	30.0	74.7
54		65.8	66.4	99.7	26.7	66.4
60		59.2	59.7	89.8	24.0	59.7
66		53.8	54.3	81.6	21.8	54.3
72		49.3	49.8	74.8	20.0	49.8
36	96	92.5	93.3	130.0	37.5	93.3
42		79.3	80.0	120.2	32.1	80.0
48		69.4	70.0	105.2	28.1	70.0
54		61.7	62.2	93.5	25.0	62.2
60		55.5	56.0	84.2	22.5	56.0
66		50.5	50.9	76.5	20.5	50.9
72		46.3	46.7	70.1	18.8	46.7
36	102	87.1	87.8	130.0	35.3	87.8
42		74.6	75.3	113.1	30.3	75.3
48		65.3	65.9	99.0	26.5	65.9
54		58.0	58.6	88.0	23.5	58.6
60		52.2	52.7	79.2	21.2	52.7
66		47.5	47.9	72.0	19.3	47.9
72		43.5	43.9	66.0	17.6	43.9
36	108	82.2	83.0	124.7	33.3	83.0
42		70.5	71.1	106.9	28.6	71.1
48		61.7	62.2	93.5	25.0	62.2
54		54.8	55.3	83.1	22.2	55.3
60		49.3	49.8	74.8	20.0	49.8
66		44.8	45.3	68.0	18.2	45.3
72		41.1	41.5	62.3	16.7	41.5
36	114	77.9	78.6	118.1	31.6	78.6
42		66.8	67.4	101.2	27.1	67.4
48		58.4	58.9	88.6	23.7	58.9
54		51.9	52.4	78.7	21.1	52.4
60		46.7	47.2	70.9	18.9	47.2
66		42.5	42.9	64.4	17.2	42.9
72		38.9	39.3	59.1	15.8	39.3
36	120	74.0	74.7	112.2	30.0	74.7
42		63.4	64.0	96.2	25.7	64.0
48		55.5	56.0	84.2	22.5	56.0
54		49.3	49.8	74.8	20.0	49.8
60		44.4	44.8	67.3	18.0	44.8
66		40.4	40.7	61.2	16.4	40.7
72		37.0	37.3	56.1	15.0	37.3

MAX. ANCHOR CAPACITY - DESIGN PRESSURES (+/- PSF)						
MAX. AVG. WIDTH 'W' (in.)	MAX. SPAN 'H' (in.)	H	I	J	K	L
36	126	70.5	71.1	106.9	28.6	71.1
42		60.4	61.0	91.6	24.5	61.0
48		52.9	53.3	80.1	21.4	53.3
54		47.0	47.4	71.2	19.0	47.4
60		42.3	42.7	64.1	17.1	42.7
66		38.4	38.8	58.3	15.6	38.8
69		36.8	37.1	55.8	14.9	37.1
36	132	67.3	67.9	102.0	27.3	67.9
42		57.7	58.2	87.4	23.4	58.2
48		50.5	50.9	76.5	20.5	50.9
54		44.8	45.3	68.0	18.2	45.3
60		40.4	40.7	61.2	16.4	40.7
66		36.7	37.0	55.6	14.9	37.0
36	138	64.3	64.9	97.6	26.1	64.9
42		55.2	55.7	83.6	22.4	55.7
48		48.3	48.7	73.2	19.6	48.7
54		42.9	43.3	65.0	17.4	43.3
60		38.6	39.0	58.5	15.7	39.0
63		36.8	37.1	55.8	14.9	37.1
36	144	61.7	62.2	93.5	25.0	62.2
42		52.9	53.3	80.1	21.4	53.3
48		46.3	46.7	70.1	18.8	46.7
54		41.1	41.5	62.3	16.7	41.5
60		37.0	37.3	56.1	15.0	37.3
36	150	59.2	59.7	89.8	24.0	59.7
42		50.7	51.2	76.9	20.6	51.2
48		44.4	44.8	67.3	18.0	44.8
54		39.5	39.8	59.8	16.0	39.8
60		35.5	35.8	53.9	14.4	35.8

- NOTE:
- REFER TO SECTION 7.0 THRU 7.6 FOR DETAILS OF ANCHOR REQUIREMENTS. AND DETERMINING MAX. SPAN 'H' AND TRIBUTARY WIDTHS 'W'
 - SEE SECTION 2, TWIN SPAN ELEVATION FOR LOCATION OF S-ANCHOR WHEN USED AT VERTICAL MULLION BETWEEN DOOR AND D.L.O.



Quality
inspires™

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)
S - ANCHOR CAPACITY TABLE

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL14217

DATE:

07.31.17

DWG. BY:

AR/RV

CHK. BY:

HFN

SCALE:

NTS

DWG. #:

YKK211

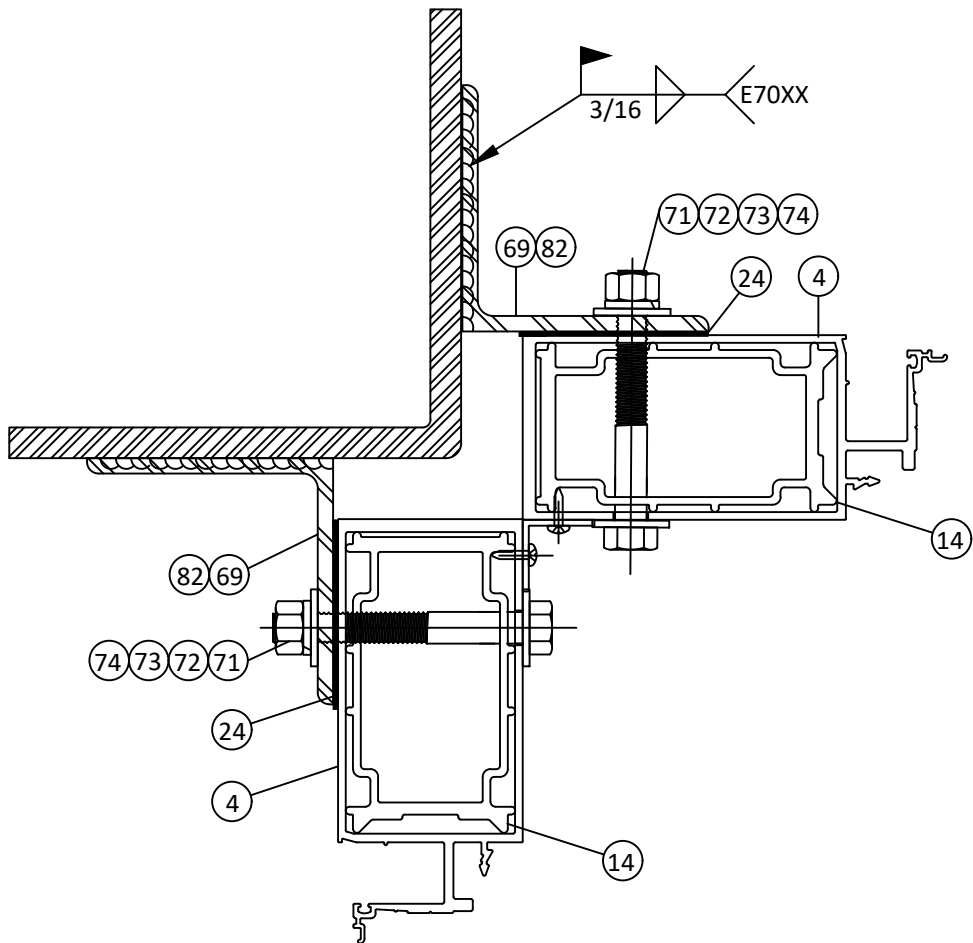
SECTION

7.9

[Page 33 of 48]

c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229\1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvh\ykk 211 - f14217 wind-dead load anchor dtds.dwg 6/2/2026 11:55 AM

- WIND LOAD & DEAD LOAD ANCHOR NOTES:
- WIND/DEAD LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
 - WL = +/- 6,300 LBS (UNFACTORED) AT DOUBLE ANGLE SUPPORTS
 - WL = +/- 3,150 LBS (UNFACTORED) AT SINGLE ANGLE SUPPORTS
 - MAX. SPAN = 12'-6"
 - MAX. TRIB WIDTH = 72"DEAD LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
 - DL = 1,219 LBS (UNFACTORED) @ DOUBLE ANGLE SUPPORTS
 - DL SHALL BE DETERMINED BY ENGINEER OF RECORD.
 - (2) BOLTS (ITEM #71) SHALL BE THROUGH BOLTED IN STANDARD HOLES AT DEAD LOAD ANCHORS AND MAX. 2" LONG SLOTTED HOLTES AT WIND LOAD ANCHORS.



ALL ANGLES AND PLATES
TO BE A-36 STEEL
Fy = 36 KSI MIN.

WIND LOAD ANCHOR

WIND + DEAD LOAD ANCHOR

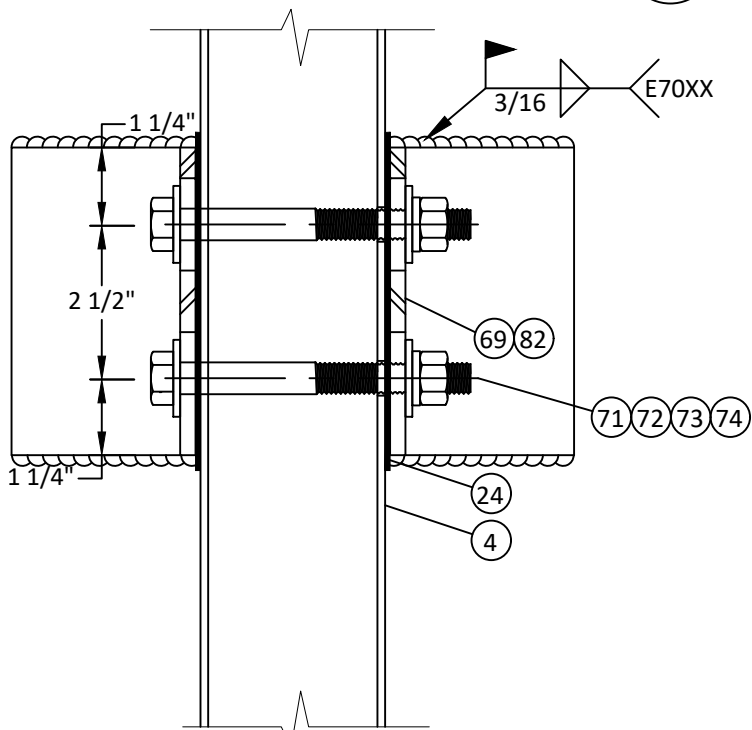
WL / DL ANCHOR CAPACITY

MAX. TRIBUTARY WIDTH 'W'	MAX. SPAN 'H'	MAX. DESIGN PRESSURE
72"	150"	+/- 130 PSF

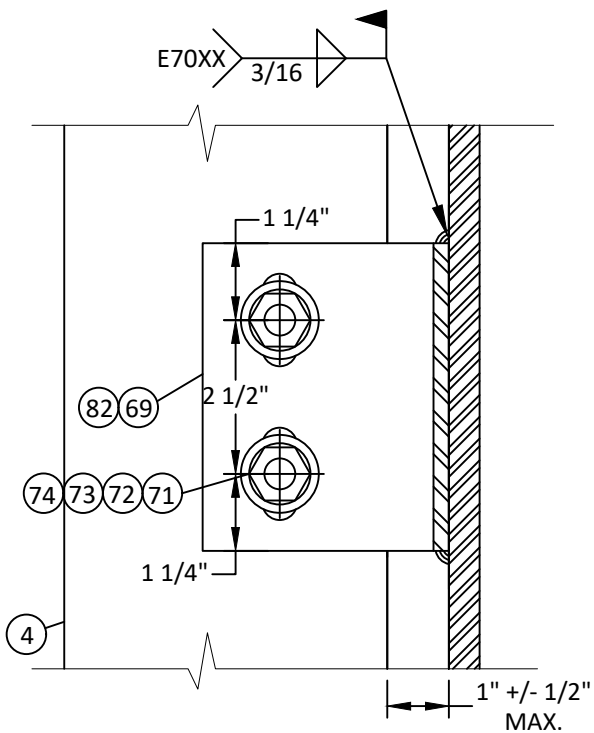
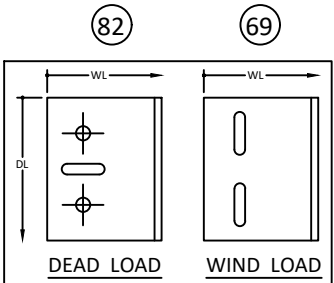
WL/DL DETAILS ALSO APPLY FOR
INSULATING GLASS
EXTRUSIONS. REFER TO
SECTIONS 3 & 4 FOR DETAILS.

NOTE:
1) ALTERNATE WIND & DEAD LOAD ANCHORS MAY BE DESIGNED FOR ALTERNATE SITE CONDITIONS AND STEEL ANGLE DESIGN ON A JOB TO JOB BASIS FOR THE APPLICABLE WIND LOADS AS DETERMINED IN ACCORDANCE WITH CH. 16 OF THE FLORIDA BLDG. CODE BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

24 **CORNER MULL. ANCH.**
8.3 **ANCHORS INTO METAL STRUCTURES**
STANDARD PRESSURE MULL



CORNER MULL FRONT VIEW
WIND/DEAD LOAD ANCHOR
AT STEEL SUBSTRATE
LOW / STANDARD / HIGH PRESSURE CONNECTION



VERTICAL SECTION
WIND LOAD ANCHOR
(DEAD LOAD ANCHOR SIMILAR)
AT STEEL SUBSTRATE
LOW / STANDARD PRESSURE CONNECTION



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

WIND LOAD / DEAD LOAD
ANCHOR DETAILS

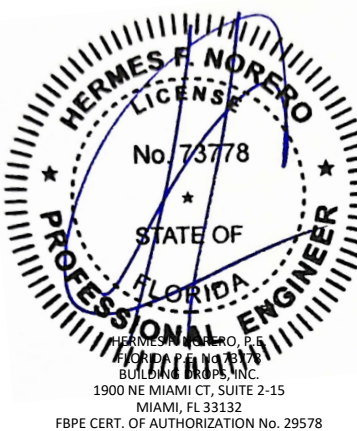
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: **07.31.17**

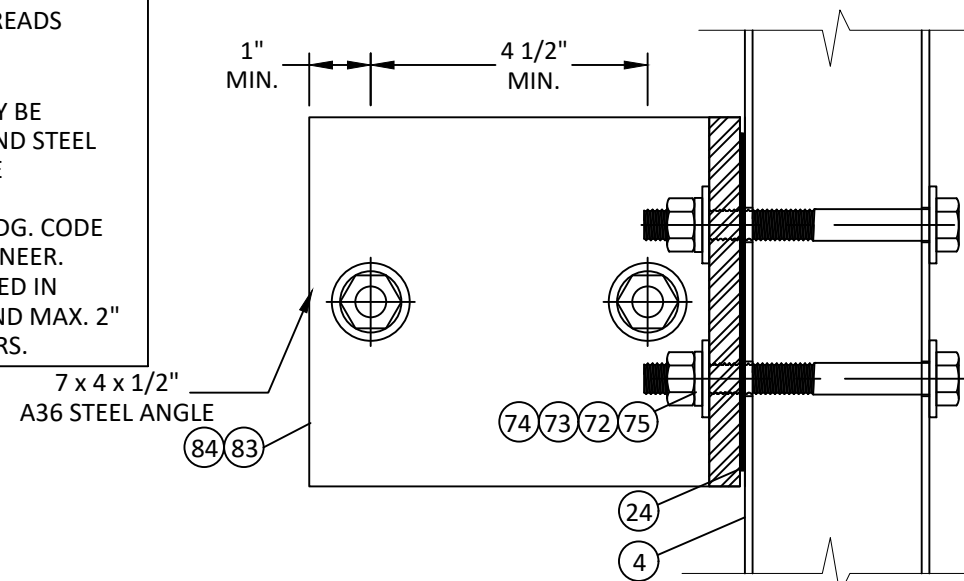
DWG. BY: **AR/RV** CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **YKK211**

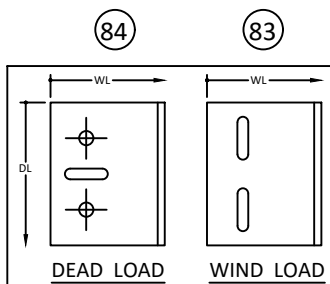
SECTION

8.3



WIND LOAD & DEAD LOAD ANCHOR NOTES:

1. WIND/DEAD LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
 - WL = +/- 6,300 LBS (UNFACTORED) AT DOUBLE ANGLE SUPPORTS
 - WL = +/- 3,150 LBS (UNFACTORED) AT SINGLE ANGLE SUPPORTS
 - MAX. SPAN = 12'-6"
 - MAX. TRIB WIDTH = 72"DEAD LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
 - DL = 1,219 LBS (UNFACTORED) @ DOUBLE ANGLE SUPPORTS
 - DL SHALL BE DETERMINED BY ENGINEER OF RECORD.
2. (2) 1/2" HH GR. 5 OR ASTM A325 THREADED BOLTS PER ANGLE
 - MIN. FULL ENGAGEMENT WITH NUT & WASHER OR
 - THREADED INTO TAPPED HOLE W/ MIN. 3 THREADS PENETRATION BEYOND STEEL STRUCTURE
 - MIN. 1 1/2" EDGE DISTANCE.
3. ALTERNATE WIND & DEAD LOAD ANCHORS MAY BE DESIGNED FOR ALTERNATE SITE CONDITIONS AND STEEL ANGLE DESIGN ON A JOB TO JOB BASIS FOR THE APPLICABLE WIND LOADS AS DETERMINED IN ACCORDANCE WITH CH. 16 OF THE FLORIDA BLDG. CODE BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.
4. (2) BOLTS (ITEM #75) SHALL BE THROUGH BOLTED IN STANDARD HOLES AT DEAD LOAD ANCHORS AND MAX. 2" LONG SLOTTED HOLTES AT WIND LOAD ANCHORS.



CH.

S

SEE NOTE 2

7 x 4 x 1/2"
A36 STEEL ANGLE

STEEL SUBSTRATE
BY OTHERS,
MIN. 3/8" THICK,
A36 STEEL

74 73 72 75

1 1/2"

3"

1 1/2"

MAX. 2" LONG
SLOTTED HOLES

84 83

4

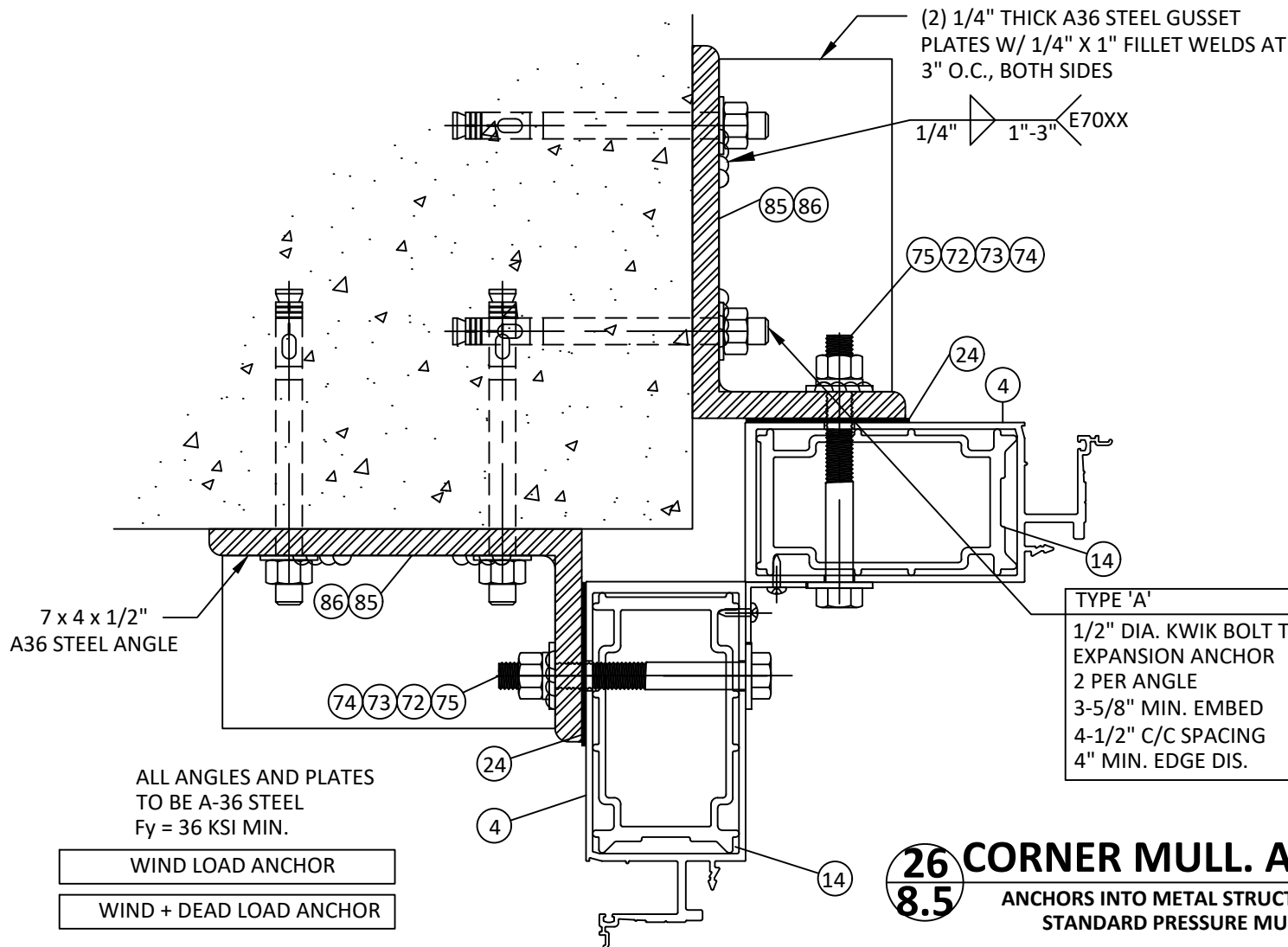
1 1/4" MIN.

2 3/4" MIN.

1" +/- 1/2"
MAX.

[Page 38 of 48]

c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229\1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvh\ykk 211 - fb-14217.dwg 8 - wind-dead load anchor details.dwg
6/2/2026 11:55 AM

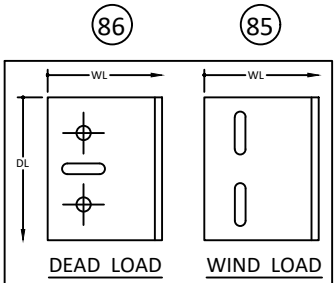
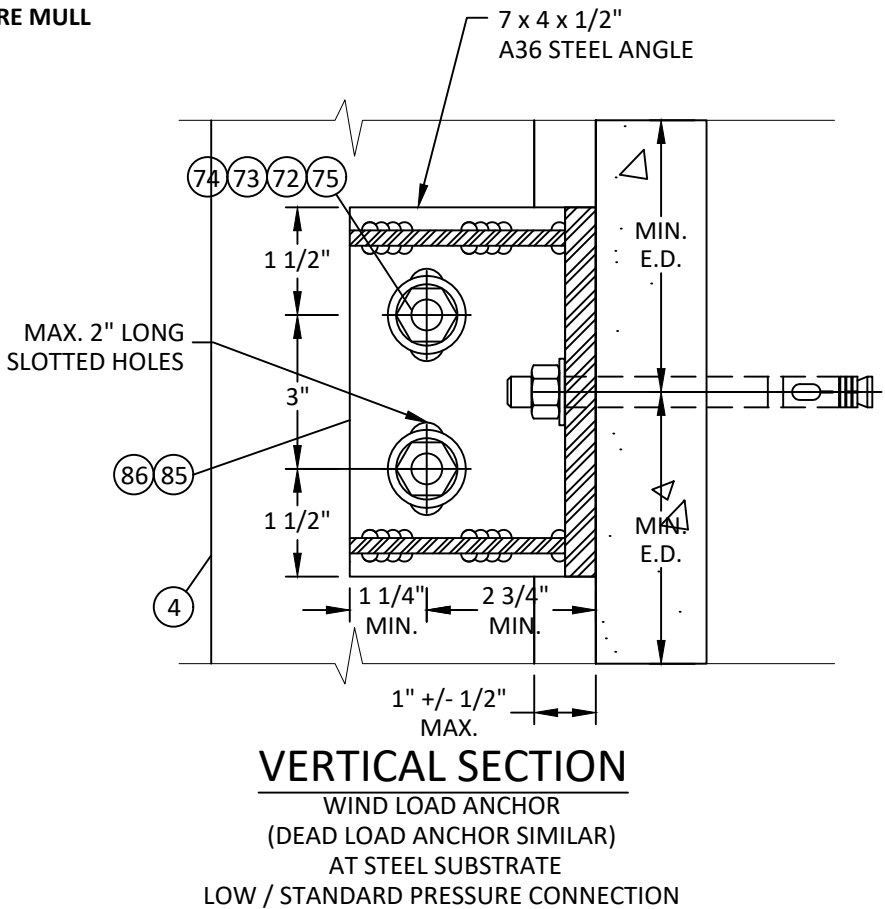
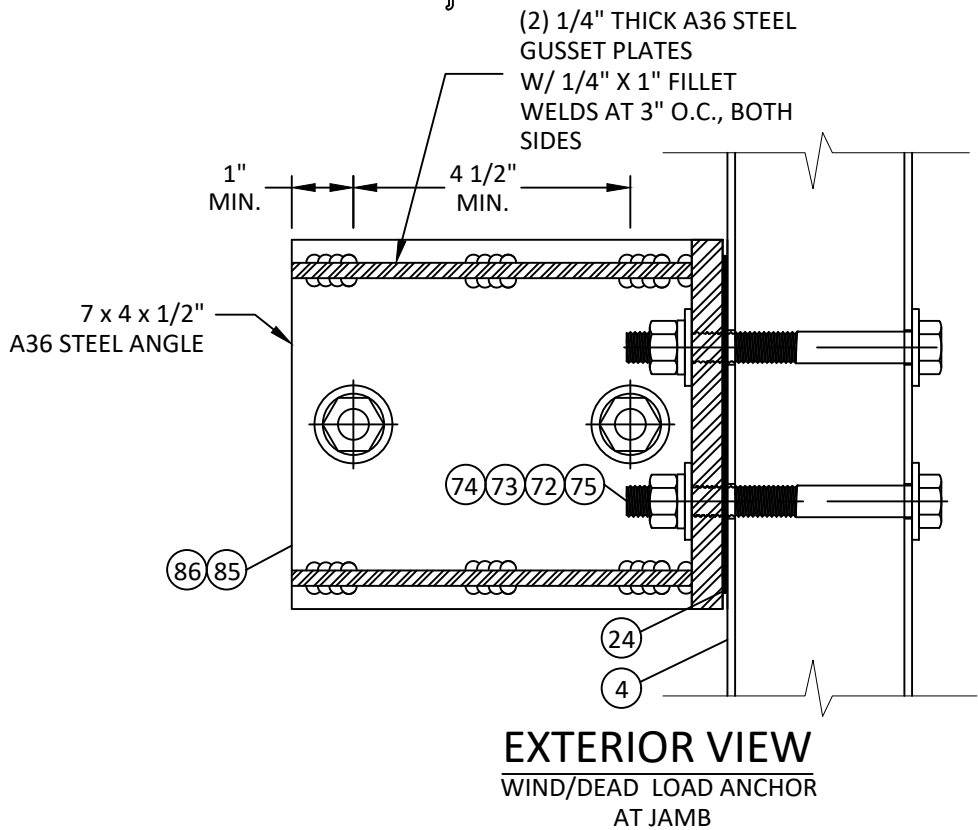


NOTE:
1) ALTERNATE WIND & DEAD LOAD ANCHORS MAY BE DESIGNED FOR ALTERNATE SITE CONDITIONS AND STEEL ANGLE DESIGN ON A JOB TO JOB BASIS FOR THE APPLICABLE WIND LOADS AS DETERMINED IN ACCORDANCE WITH CH. 16 OF THE FLORIDA BLDG. CODE BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

WL/DL DETAILS ALSO APPLY FOR INSULATING GLASS EXTRUSIONS. REFER TO SECTIONS 3 & 4 FOR DETAILS.

WL / DL ANCHOR CAPACITY		
MAX. TRIBUTARY WIDTH 'W'	MAX. SPAN 'H'	MAX. DESIGN PRESSURE
72"	150"	+/- 130 PSF

WIND LOAD ANCHOR NOTES:
1. WIND LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
• WL = +/- 6,500 LBS (UNFACTORED) @ DOUBLE ANGLE SUPPORTS
• WL = +/- 3,250 LBS (UNFACTORED) @ SINGLE ANGLE SUPPORTS
• MAX. SPAN = 12'-6"
• MAX. TRIB WIDTH = 72"
DEAD LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
• DL = 1,219 LBS (UNFACTORED) @ DOUBLE ANGLE SUPPORTS



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

WIND LOAD / DEAD LOAD
ANCHOR DETAILS

PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:

FL14217

DATE: 07.31.17

DWG. BY: AR/RV
CHK. BY: HFN

SCALE: NTS

DWG. #: YKK211

SECTION

8.5

[Page 39 of 48]

c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbcc-21-1229\1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvha\ykk 211 - fl14217 dwgs 8 - wind-dead load anchor details.dwg 6/2/2026 11:55 AM

STANDARD MULLION WIND/DEAD LOAD ANCHOR CAPACITIES

WIND LOAD + DEAD LOAD MAXIMUM DESIGN PRESSURE - LIMITED BY ANCHOR CAPACITY (+/- PSF)					
NOMINAL DIMENSIONS		MONOLITHIC		INSULATED	
WIDTH (IN.)	HEIGHT (IN.)	ANCHOR 'UNCRAKED'	ANCHOR 'CRACKED'	ANCHOR 'UNCRAKED'	ANCHOR 'CRACKED'
30	108	130.0	130.0	120.0	120.0
36		130.0	128.9	120.0	120.0
42		128.8	110.5	120.0	110.5
48		112.7	96.7	112.7	96.7
54		100.1	85.9	100.1	85.9
60		90.1	77.3	90.1	77.3
66		81.9	70.3	81.9	70.3
72	114	75.1	64.4	75.1	64.4
30		130.0	130.0	120.0	120.0
36		130.0	122.1	120.0	120.0
42		122.0	104.7	120.0	104.7
48		106.7	91.6	106.7	91.6
54		94.9	81.4	94.9	81.4
60		85.4	73.3	85.4	73.3
66	120	77.6	66.6	77.6	66.6
72		71.2	61.1	71.2	61.1
30		130.0	130.0	120.0	120.0
36		130.0	116.0	120.0	116.0
42		115.9	99.4	115.9	99.4
48		101.4	87.0	101.4	87.0
54		90.1	77.3	90.1	77.3
60	126	81.1	69.6	81.1	69.6
66		73.7	63.3	73.7	63.3
72		67.6	58.0	67.6	58.0
30		130.0	130.0	120.0	120.0
36		128.8	110.5	120.0	110.5
42		110.4	94.7	110.4	94.7
48		96.6	82.9	96.6	82.9
54	132	85.8	73.7	85.8	73.7
60		77.3	66.3	77.3	66.3
66		70.2	60.3	70.2	60.3
69		67.2	57.6	67.2	57.6
30		130.0	126.5	120.0	120.0
36		122.9	105.5	120.0	105.5
42		105.4	90.4	105.4	90.4
48	138	92.2	79.1	92.2	79.1
54		81.9	70.3	81.9	70.3
60		73.7	63.3	73.7	63.3
66		67.0	57.5	67.0	57.5
30		130.0	121.0	120.0	120.0
36		117.6	100.9	117.6	100.9
42		100.8	86.5	100.8	86.5
48	144	88.2	75.7	88.2	75.7
54		78.4	67.2	78.4	67.2
60		70.5	60.5	70.5	60.5
63		67.2	57.6	67.2	57.6
30		130.0	116.0	120.0	116.0
36		112.7	96.7	112.7	96.7
42		96.6	82.9	96.6	82.9
48	150	84.5	72.5	84.5	72.5
54		75.1	64.4	75.1	64.4
60		67.6	58.0	67.6	58.0
30		129.8	111.4	120.0	111.4
36		108.2	92.8	108.2	92.8
42		92.7	79.5	92.7	79.5
48		81.1	69.6	81.1	69.6
54	150	72.1	61.9	72.1	61.9
60		64.9	55.7	64.9	55.7

WIND LOAD MAXIMUM DESIGN PRESSURE - LIMITED BY ANCHOR CAPACITY (+/- PSF)					
NOMINAL DIMENSIONS		MONOLITHIC		INSULATED	
WIDTH (IN.)	HEIGHT (IN.)	ANCHOR 'UNCRAKED'	ANCHOR 'CRACKED'	ANCHOR 'UNCRAKED'	ANCHOR 'CRACKED'
30	108	130.0	130.0	120.0	120.0
36		130.0	130.0	120.0	120.0
42		130.0	121.9	120.0	120.0
48		123.3	106.7	120.0	106.7
54		109.6	94.8	109.6	94.8
60		98.7	85.3	98.7	85.3
66		89.7	77.6	89.7	77.6
72	114	82.2	71.1	82.2	71.1
30		130.0	130.0	120.0	120.0
36		130.0	130.0	120.0	120.0
42		130.0	115.5	120.0	115.5
48		116.8	101.1	116.8	101.1
54		103.9	89.8	103.9	89.8
60		93.5	80.8	93.5	80.8
66	120	85.0	73.5	85.0	73.5
72		77.9	67.4	77.9	67.4
30		130.0	130.0	120.0	120.0
36		130.0	128.0	120.0	120.0
42		126.9	109.7	120.0	109.7
48		111.0	96.0	111.0	96.0
54		98.7	85.3	98.7	85.3
60	126	88.8	76.8	88.8	76.8
66		80.7	69.8	80.7	69.8
72		74.0	64.0	74.0	64.0
30		130.0	130.0	120.0	120.0
36		130.0	121.9	120.0	120.0
42		120.8	104.5	120.0	104.5
48		105.7	91.4	105.7	91.4
54	132	94.0	81.3	94.0	81.3
60		84.6	73.1	84.6	73.1
66		76.9	66.5	76.9	66.5
69		73.5	63.6	73.5	63.6
30		130.0	130.0	120.0	120.0
36		130.0	116.4	120.0	116.4
42		115.3	99.7	115.3	99.7
48	138	100.9	87.3	100.9	87.3
54		89.7	77.6	89.7	77.6
60		80.7	69.8	80.7	69.8
66		73.4	63.5	73.4	63.5
30		130.0	130.0	120.0	120.0
36		128.7	111.3	120.0	111.3
42		110.3	95.4	110.3	95.4
48	144	96.5	83.5	96.5	83.5
54		85.8	74.2	85.8	74.2
60		77.2	66.8	77.2	66.8
63		73.5	63.6	73.5	63.6
30		130.0	128.0	120.0	120.0
36		123.3	106.7	120.0	106.7
42		105.7	91.4	105.7	91.4
48	150	92.5	80.0	92.5	80.0
54		82.2	71.1	82.2	71.1
60		74.0	64.0	74.0	64.0
30		130.0	122.9	120.0	120.0
36		118.4	102.4	118.4	102.4
42		101.5	87.8	101.5	87.8
48		88.8	76.8	88.8	76.8
54	150	78.9	68.3	78.9	68.3
60		71.0	61.4	71.0	61.4



Quality
inspires™

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)
WIND LOAD / DEAD LOAD
ANCHOR DETAILS

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
FL14217

DATE:
07.31.17

DWG. BY:
AR/RV

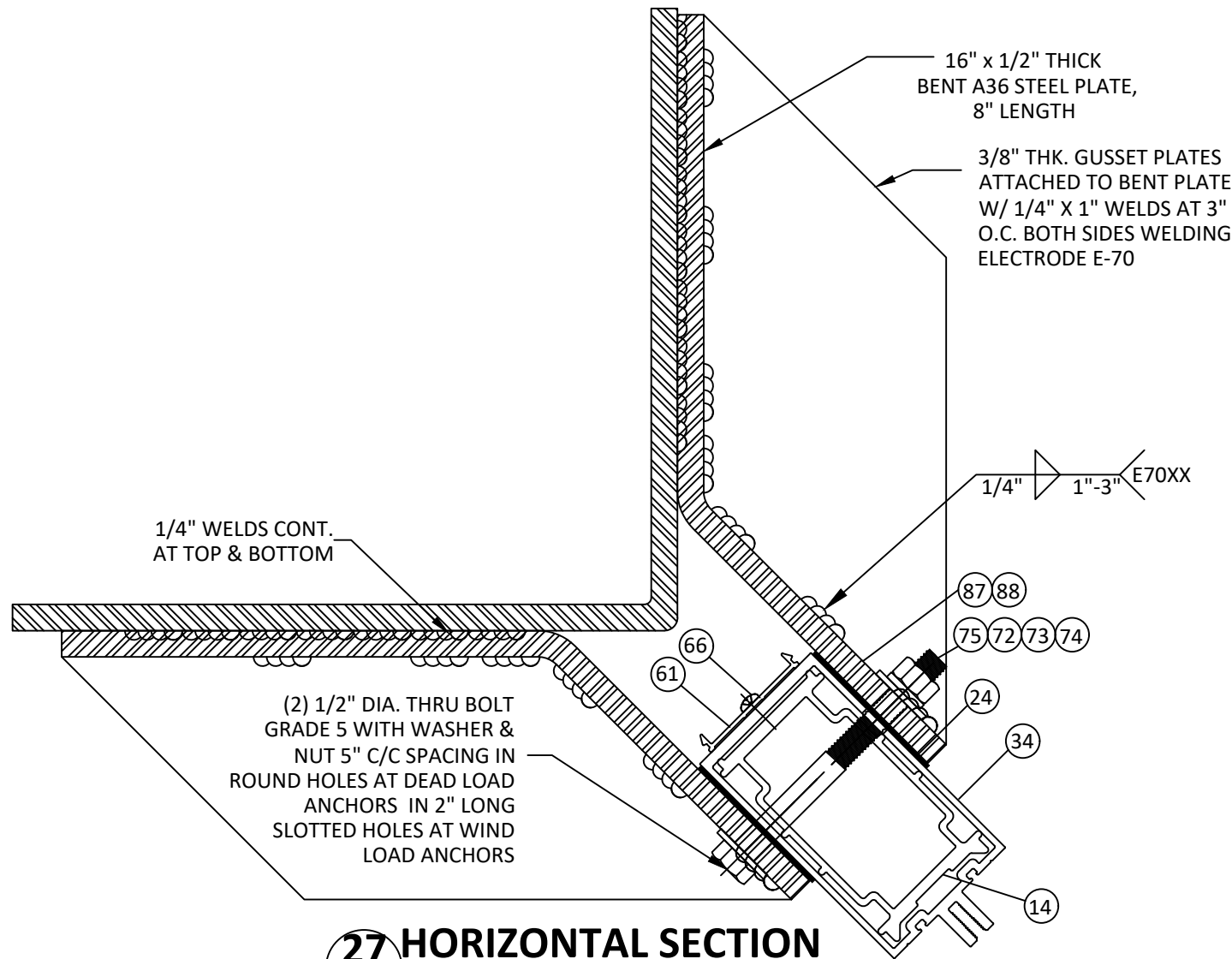
CHK. BY:
HFN

SCALE:
NTS

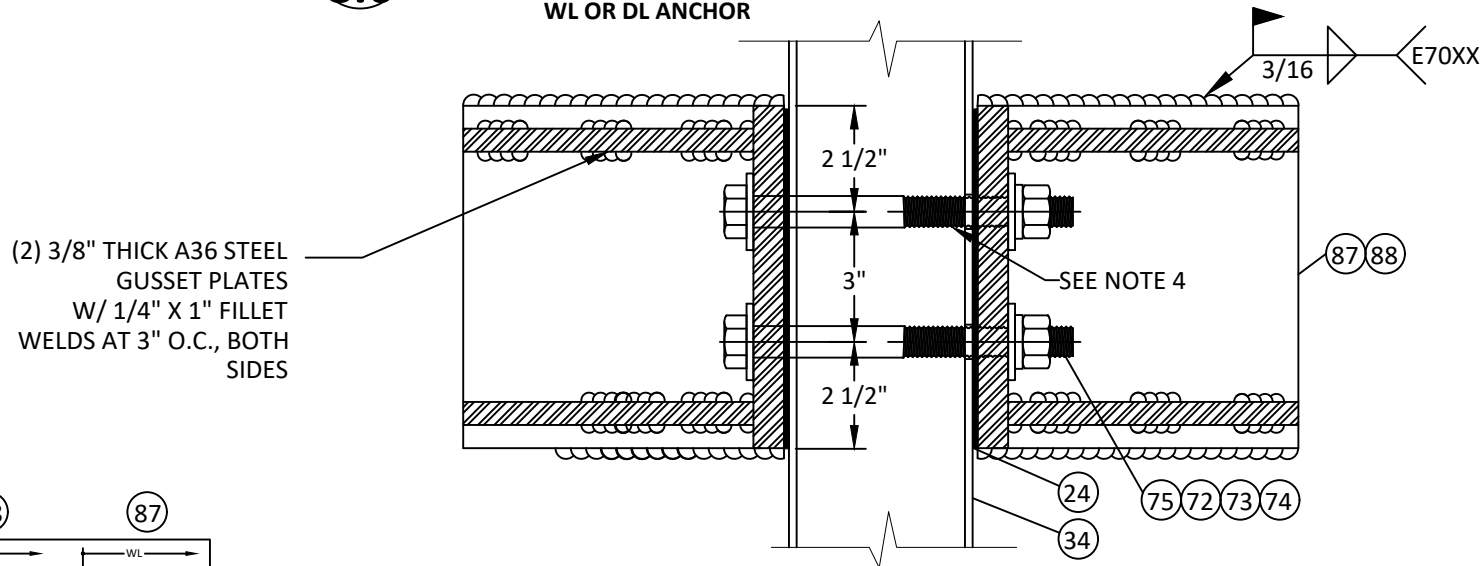
DWG. #:
YKK211

SECTION
8.5A
[Page 40 of 48]

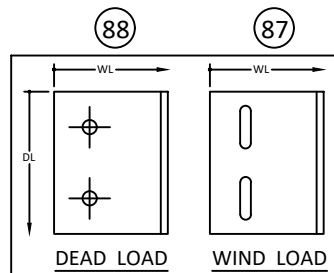
c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fc-21-1229\1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvh\ykk 211 - fl14217 dwgs 8 - wind-dead load anchor dtls.dwg
6/2/2026 11:55 AM



27
8.6 **HORIZONTAL SECTION**
ANGLED CORNER
WL OR DL ANCHOR



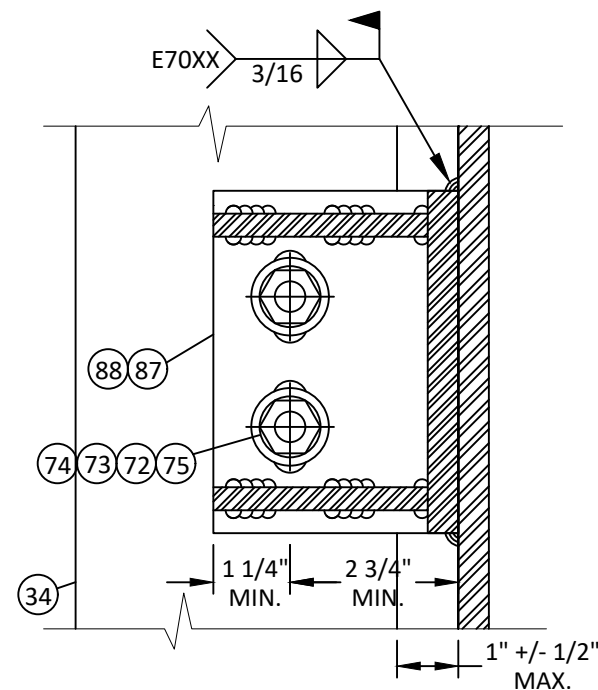
CORNER MULL FRONT VIEW
WIND/DEAD LOAD ANCHOR
AT STEEL SUBSTRATE
LOW / STANDARD / HIGH PRESSURE CONNECTION



- WIND LOAD & DEAD LOAD ANCHOR NOTES:
- WIND/DEAD LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
 - WL = +/- 6,300 LBS (UNFACTORED) AT DOUBLE ANGLE SUPPORTS
 - WL = +/- 3,150 LBS (UNFACTORED) AT SINGLE ANGLE SUPPORTS
 - MAX. SPAN = 12'-6"
 - MAX. TRIB WIDTH = 72"DEAD LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
 - DL = 1,219 LBS (UNFACTORED) @ DOUBLE ANGLE SUPPORTS
 - DL SHALL BE DETERMINED BY ENGINEER OF RECORD.
 - ALTERNATE WIND & DEAD LOAD ANCHORS MAY BE DESIGNED FOR ALTERNATE SITE CONDITIONS AND STEEL ANGLE DESIGN ON A JOB TO JOB BASIS FOR THE APPLICABLE WIND LOADS AS DETERMINED IN ACCORDANCE WITH CH. 16 OF THE FLORIDA BLDG. CODE BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.
 - (2) BOLTS (ITEM #75) SHALL BE THROUGH BOLTED IN STANDARD HOLES AT DEAD LOAD ANCHORS AND MAX. 2" LONG SLOTTED HOLTES AT WIND LOAD ANCHORS.

WL/DL DETAILS ALSO APPLY FOR
INSULATING GLASS
EXTRUSIONS. REFER TO
SECTIONS 3 & 4 FOR DETAILS.

WL / DL ANCHOR CAPACITY		
MAX. TRIBUTARY WIDTH 'W'	MAX. SPAN 'H'	MAX. DESIGN PRESSURE
72"	150"	+/- 130 PSF



VERTICAL SECTION
WIND LOAD ANCHOR
(DEAD LOAD ANCHOR SIMILAR)
AT STEEL SUBSTRATE
LOW / STANDARD / HIGH PRESSURE CONNECTION



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

WIND LOAD / DEAD LOAD
ANCHOR DETAILS

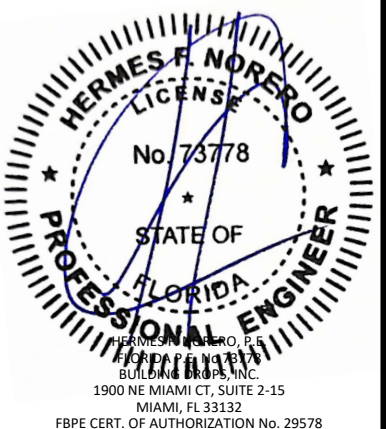
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

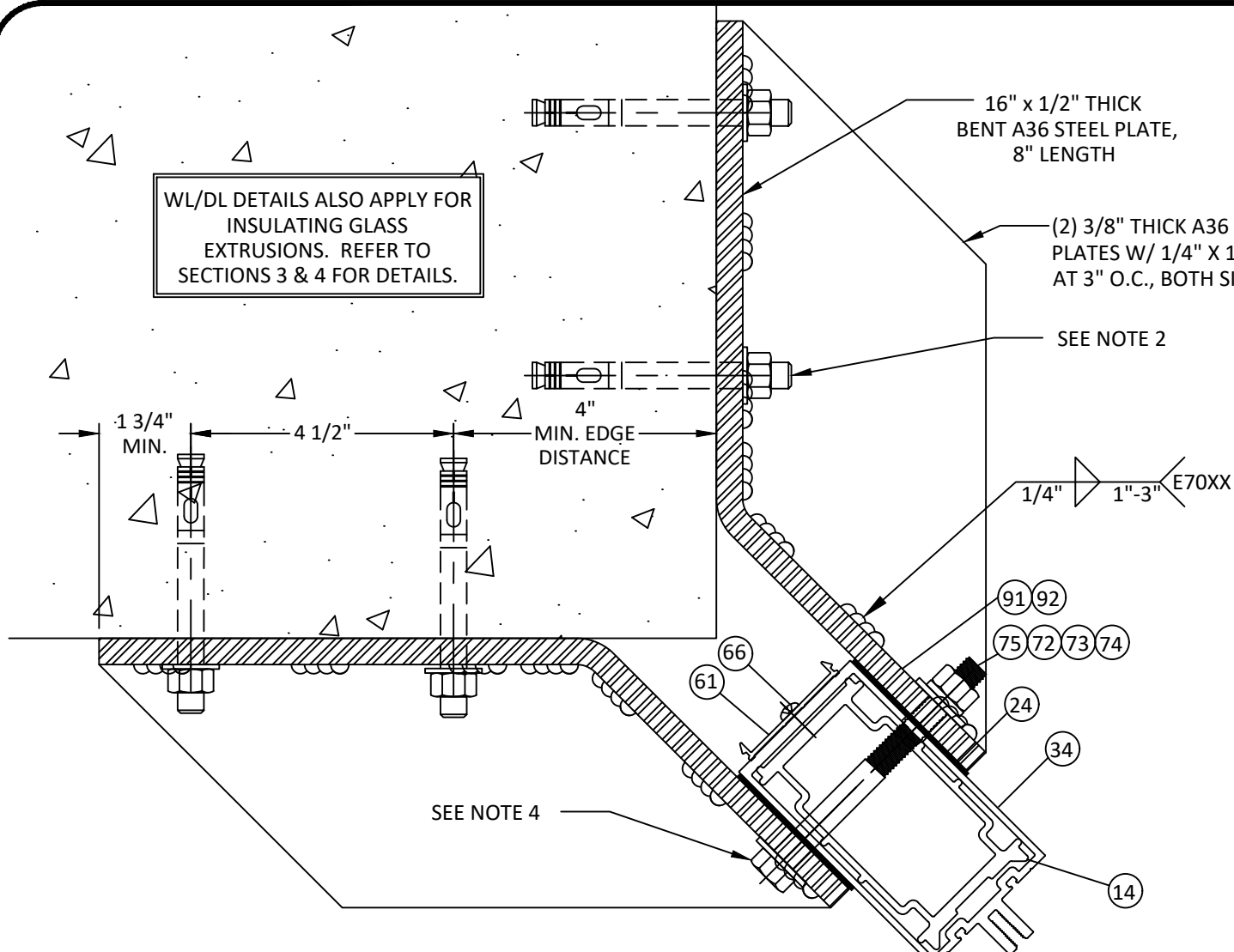
SCALE: **NTS**

DWG. #: **YKK211**

SECTION

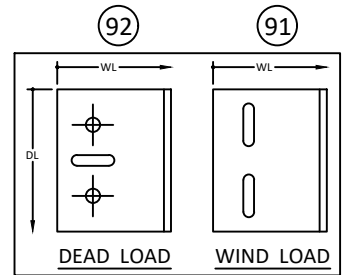
8.6

c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbc-21-1229\1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvhb\ykk 211 - fl14217.dwg 8 - wind-dead load anchor details.dwg 6/2/2026 11:55 AM

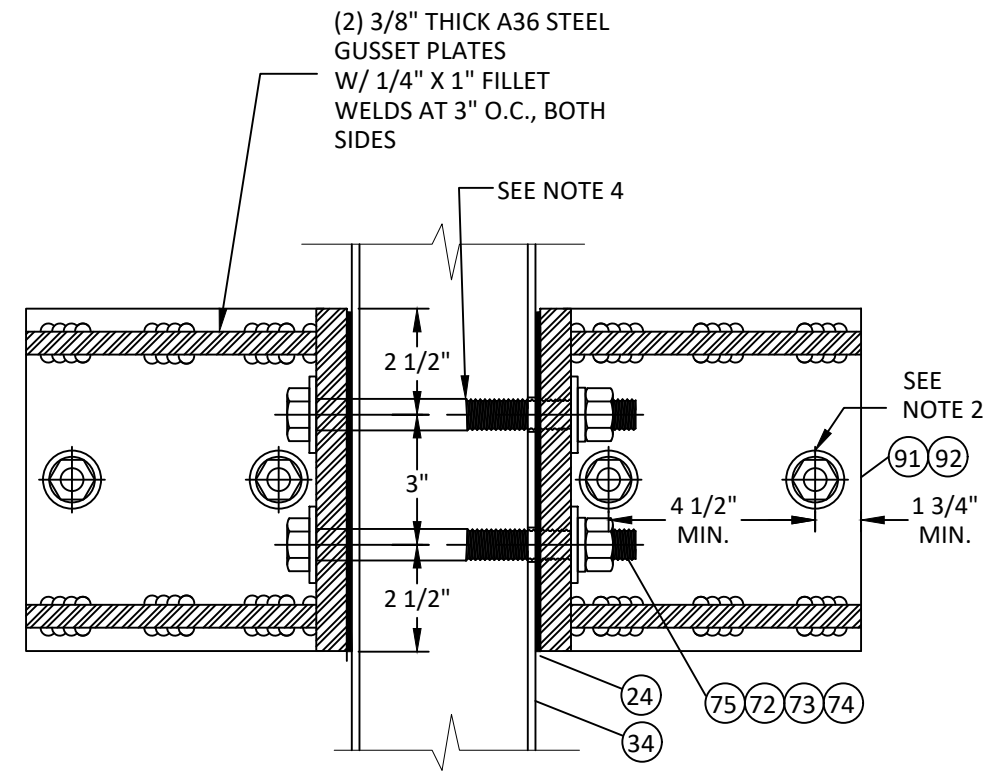


29 HORIZONTAL SECTION
8.8
OUTSIDE CORNER
WL OR DL ANCHOR

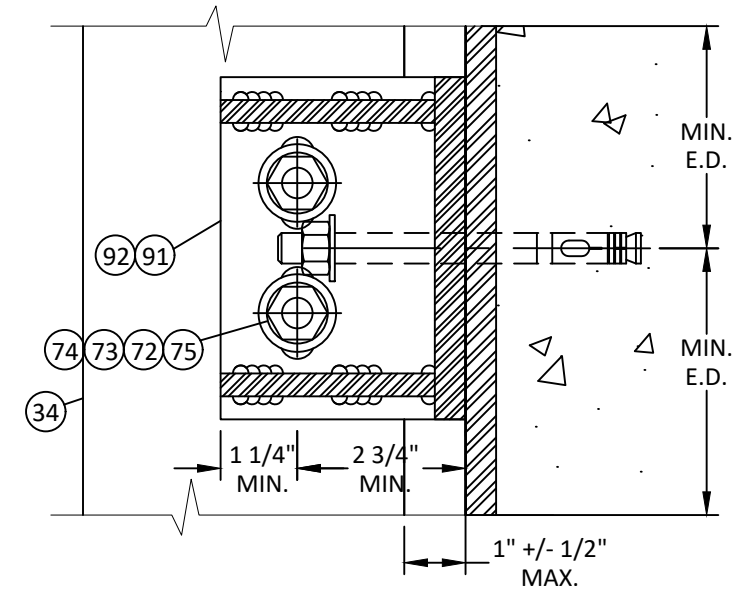
NOTE:
1) ALTERNATE WIND & DEAD LOAD ANCHORS MAY BE DESIGNED FOR ALTERNATE SITE CONDITIONS AND STEEL ANGLE DESIGN ON A JOB TO JOB BASIS FOR THE APPLICABLE WIND LOADS AS DETERMINED IN ACCORDANCE WITH CH. 16 OF THE FLORIDA BLDG. CODE BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.



- WIND LOAD ANCHOR NOTES:
- WIND LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
 - WL = +/- 6,500 LBS (UNFACTORED) @ DOUBLE ANGLE SUPPORTS
 - WL = +/- 3,250 LBS (UNFACTORED) @ SINGLE ANGLE SUPPORTS
 - MAX. SPAN = 12'-6"
 - MAX. TRIB WIDTH = 72"DEAD LOAD ANCHORS HAVE BEEN EVALUATED TO THE FOLLOWING:
 - DL = 1,219 LBS (UNFACTORED) @ DOUBLE ANGLE SUPPORTS
 - (2) 1/2" HILTI KWIK BOLT TZ PER ANGLE
 - MIN. EMBEDMENT = 3 5/8"
 - MAX. C.C. SPACING = 4 1/2"
 - MIN. EDGE DISTANCE = 4"
 - MIN. 4000 PSI CONCRETE
 - FOR SLABS LESS THAN 8" IN THICKNESS, DESIGN MAY BE PROVIDED ON JOB TO JOB BASIS FOR REVIEW & APPROVAL BY AHJ
 - (2) BOLTS (ITEM #75) SHALL BE THROUGH BOLTED IN STANDARD HOLES AT DEAD LOAD ANCHORS AND MAX. 2" LONG SLOTTED HOLTES AT WIND LOAD ANCHORS.



CORNER MULL FRONT VIEW
WIND/DEAD LOAD ANCHOR
AT STEEL SUBSTRATE
LOW/ STANDARD/ HIGH PRESSURE CONNECTION



VERTICAL SECTION
WIND LOAD ANCHOR
(DEAD LOAD ANCHOR SIMILAR)
AT STEEL SUBSTRATE
LOW / STANDARD/HIGH PRESSURE CONNECTION



Quality
inspires™

YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

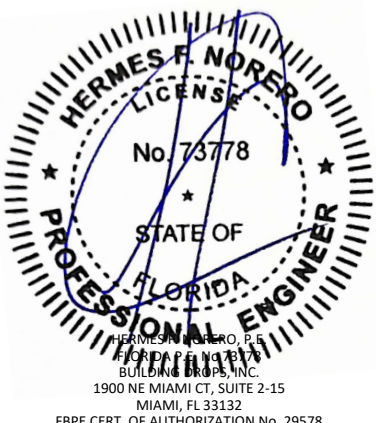
TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)
WIND LOAD / DEAD LOAD
ANCHOR DETAILS

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL14217

DATE:

07.31.17

DWG. BY:

AR/RV

CHK. BY:

HFN

SCALE:

NTS

DWG. #:

YKK211

SECTION

8.8

[Page 43 of 48]

CORNER MULLION WIND/DEAD LOAD ANCHOR CAPACITIES

CORNER MULLION ANCHOR - MAXIMUM DESIGN PRESSURE - LIMITED BY ANCHOR CAPACITY (+/- PSF)					
NOMINAL DIMENSIONS		WL ANCHOR	WL ANCHOR	DL+WL ANCHOR	DL+WL ANCHOR
WIDTH (IN.)	HEIGHT (IN.)	'UNCRACKED'	'CRACKED'	'UNCRACKED'	'CRACKED'
30	108	120.0	93.6	114.0	80.9
36		100.0	78.0	95.0	67.5
42		85.7	66.9	81.4	57.8
48		75.0	58.5	71.3	50.6
54		66.7	52.0	63.3	45.0
60		60.0	46.8	57.0	40.5
66		54.5	42.5	-	-
72		50.0	39.0	-	-
30	114	113.7	88.7	108.0	76.7
36		94.7	73.9	90.0	63.9
42		81.2	63.3	77.1	54.8
48		71.1	55.4	67.5	47.9
54		63.2	49.3	60.0	42.6
60		56.8	44.3	54.0	38.3
66		51.7	40.3	-	-
72		47.4	36.9	-	-
30	120	108.0	84.2	102.6	72.8
36		90.0	70.2	85.5	60.7
42		77.1	60.2	73.3	52.0
48		67.5	52.7	64.1	45.5
54		60.0	46.8	57.0	40.5
60		54.0	42.1	51.3	36.4
66		49.1	38.3	-	-
72		45.0	35.1	-	-
30	126	102.9	80.2	97.7	69.4
36		85.7	66.9	81.4	57.8
42		73.5	57.3	69.8	49.6
48		64.3	50.1	61.1	43.4
54		57.1	44.6	54.3	38.5
60		51.4	40.1	48.9	34.7
66		46.8	36.5	-	-
69		44.7	34.9	-	-
30	132	98.2	76.6	93.3	66.2
36		81.8	63.8	77.7	55.2
42		70.1	54.7	66.6	47.3
48		61.4	47.9	58.3	41.4
54		54.5	42.5	51.8	36.8
60		49.1	38.3	46.6	33.1
66		44.6	34.8	-	-
30	138	93.9	73.3	89.2	63.3
36		78.3	61.0	74.3	52.8
42		67.1	52.3	63.7	45.2
48		58.7	45.8	55.8	39.6
54		52.2	40.7	49.6	35.2
60		47.0	36.6	44.6	31.7
63		44.7	34.9	-	-
30	144	90.0	70.2	85.5	60.7
36		75.0	58.5	71.3	50.6
42		64.3	50.1	61.1	43.4
48		56.3	43.9	53.4	37.9
54		50.0	39.0	47.5	33.7
60		45.0	35.1	42.8	30.4
30	150	86.4	67.4	82.1	58.3
36		72.0	56.2	68.4	48.6
42		61.7	48.1	58.6	41.6
48		54.0	42.1	51.3	36.4
54		48.0	37.4	45.6	32.4
60		43.2	33.7	41.0	29.1



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

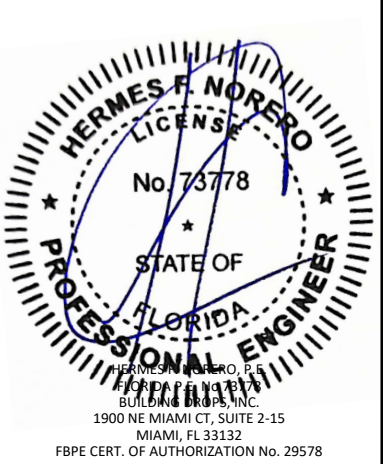
TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)
WIND LOAD / DEAD LOAD
ANCHOR DETAILS

PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744.4738
WEB: www.buildingdrops.com

BUILDING DROPS

REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: **07.31.17**

DWG. BY:
AR/RV

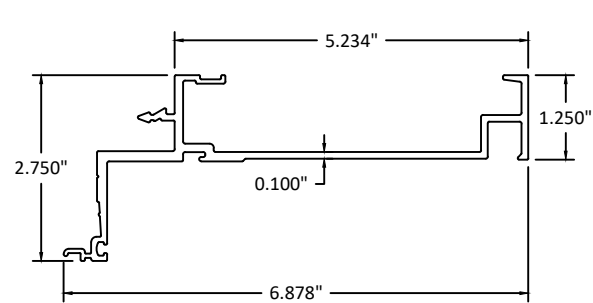
CHK. BY:
HFN

SCALE: **NTS**

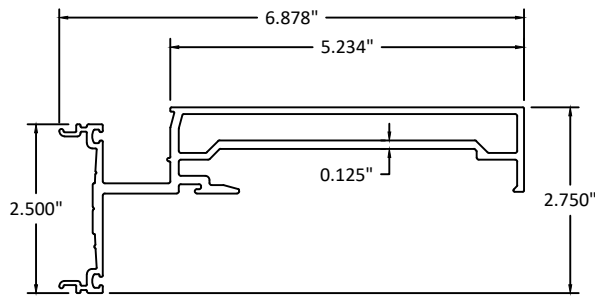
DWG. #: **YKK211**

SECTION
8.9
[Page 44 of 48]

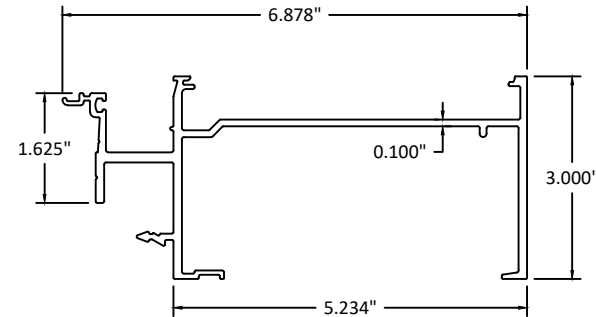
c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fboc-21-1229.1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvh\ykk 211 - fl14217 dwgs 9 - components & bom.dwg 6/2/2026 11:55 AM



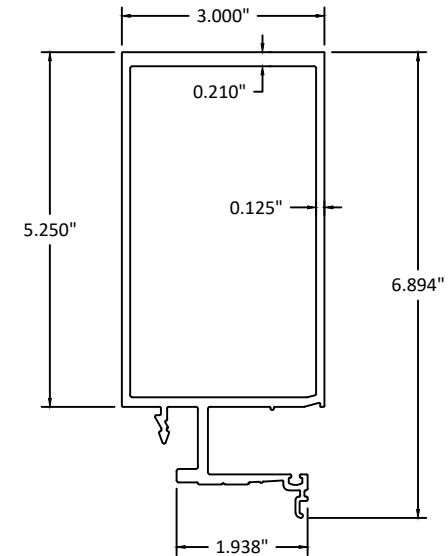
① HEAD (MONO)



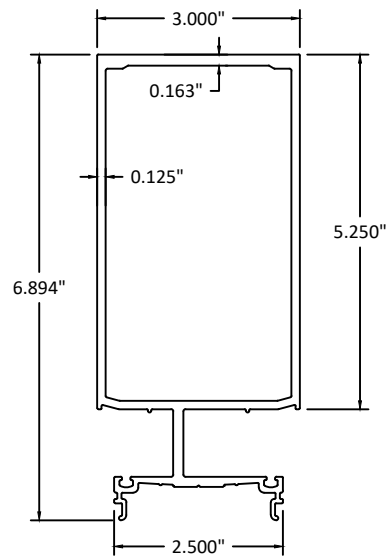
② HORIZONTAL (MONO)



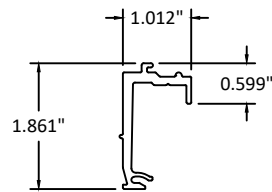
③ SILL (MONO)



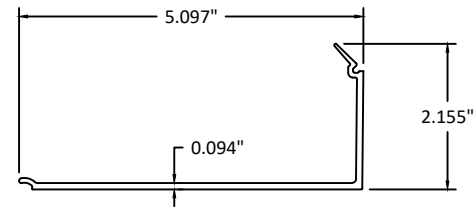
④ JAMB (MONO)



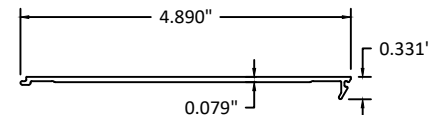
⑤ VERTICAL MULLION (MONO)



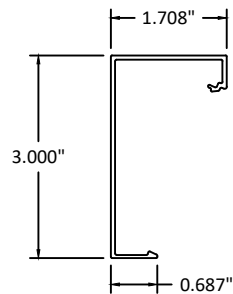
⑥ GLASS STOP



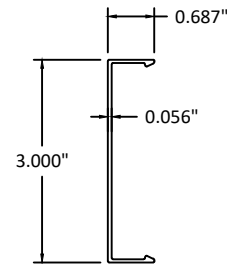
⑧ HORIZONTAL SNAP COVER



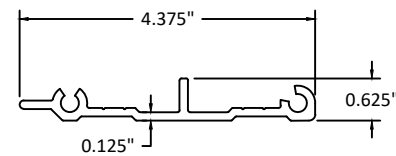
⑩ FLUSH FILLER



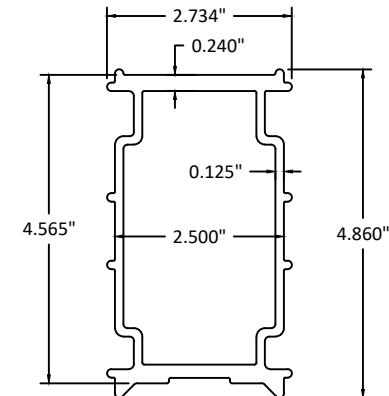
⑦ PERIMETER FACE COVER (MONO)



⑨ FACE COVER



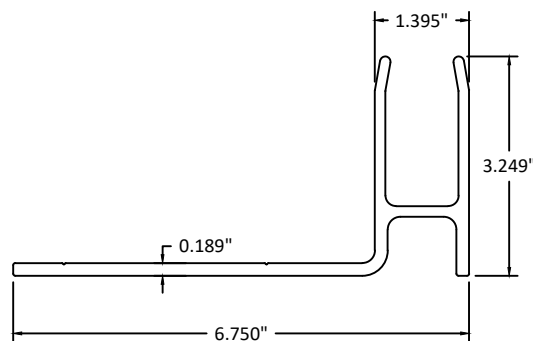
⑪ SHEAR BLOCK



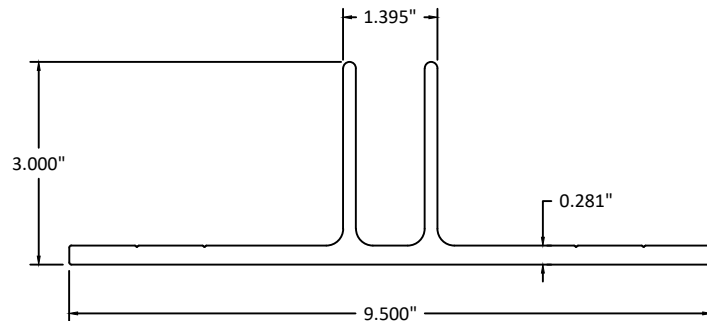
⑫ MULLION SPLICE SLEEVE 6" LG

⑬ MULLION ANCHOR SLEEVE 3" LG

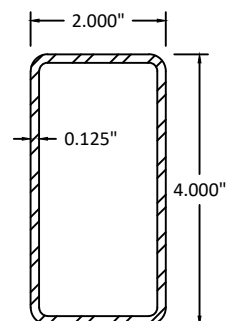
⑭ SPLICE REINFORCEMENT SLEEVE 29" LG



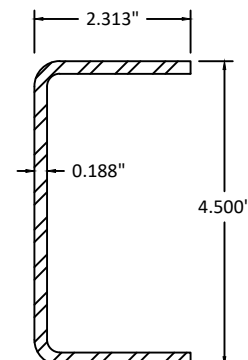
⑮ JAMB 'F' ANCHOR



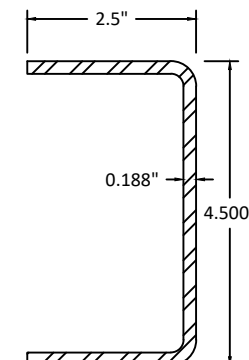
⑯ MULLION 'T' ANCHOR



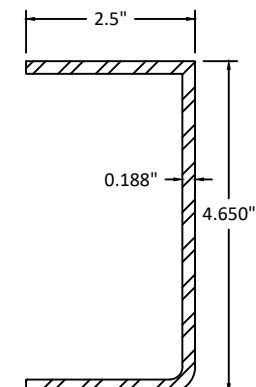
⑰ STEEL TUBE



⑱ STEEL CHANNEL



⑲ REINFORCEMENT CHANNEL



⑲A CHANNEL AT CORNER MULLION (NOT BY YKK AP)



YKK AP AMERICA, Inc.

1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

COMPONENTS

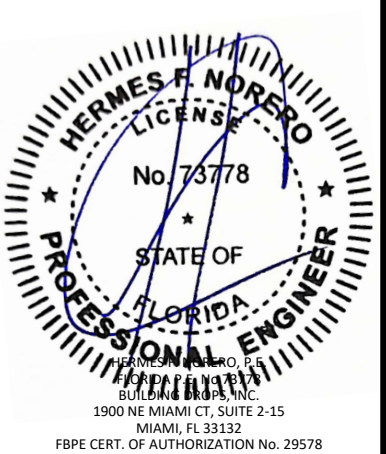
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #: **FL14217**

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

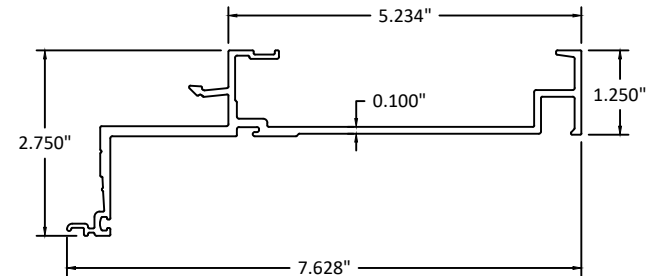
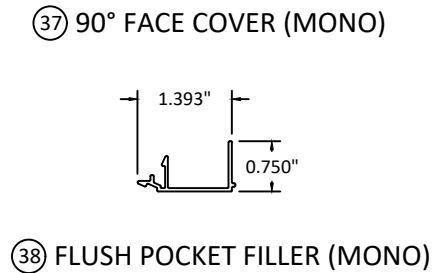
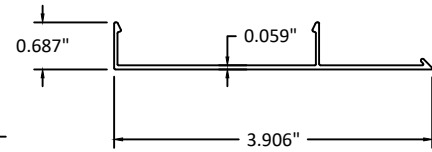
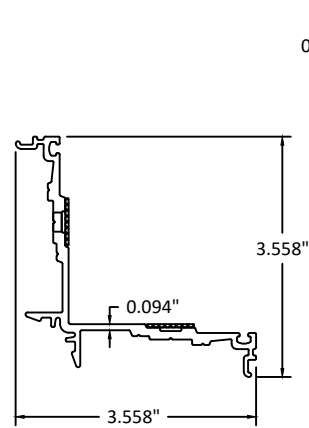
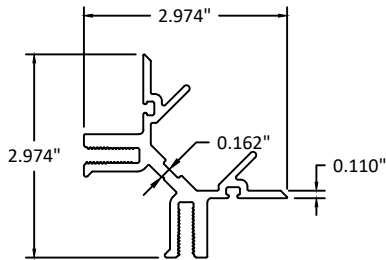
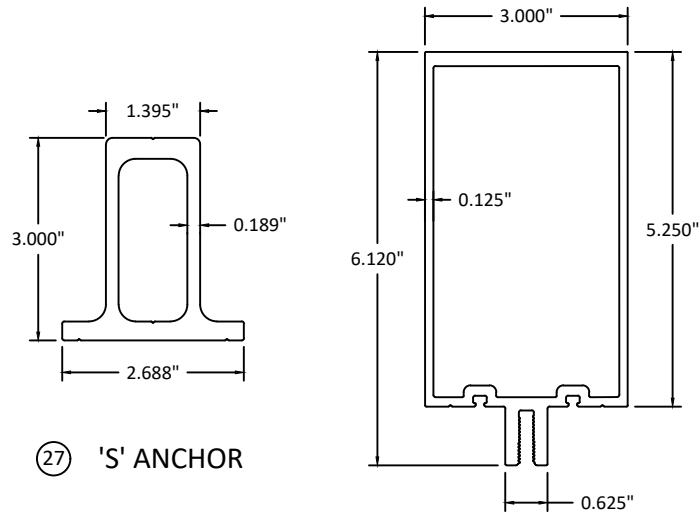
SCALE: **NTS**

DWG. #: **YKK211**

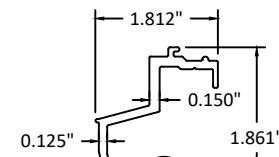
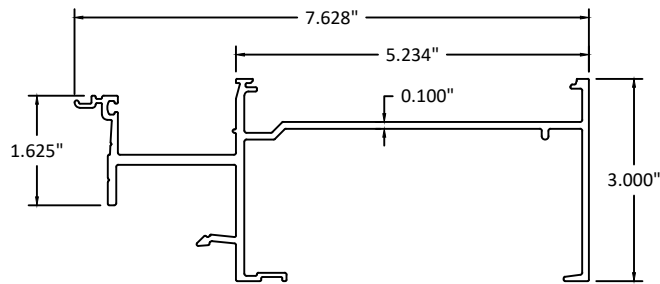
SECTION

9.0

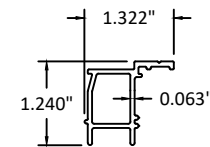
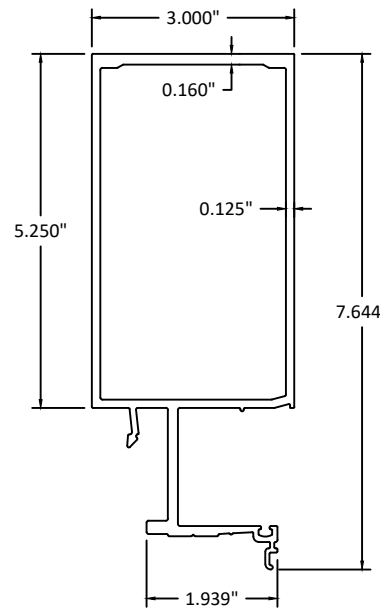
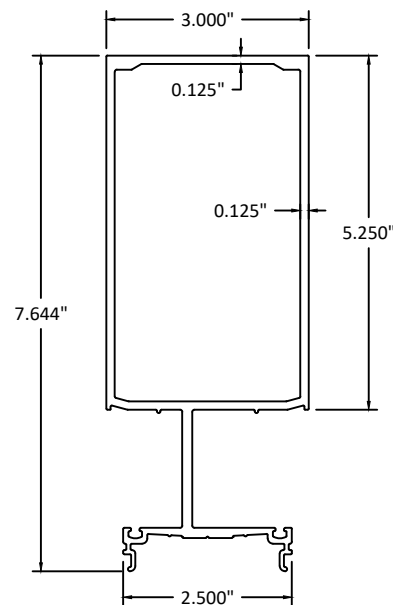
c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fbcc-21-1229.1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvh\ykk 211 - fl14217 dwgs 9 - components & bom.dwg 6/2/2026 11:55 AM



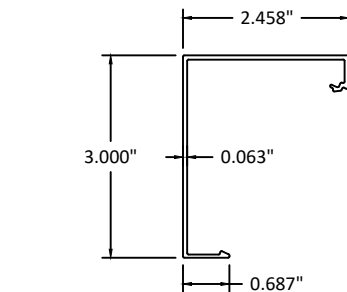
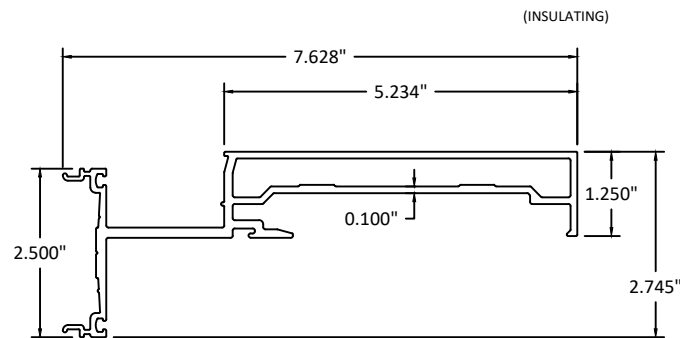
34 CORNER MULLION (MONO) 35 90° CORNER ADAPTOR (MONO) 36 90° CORNER PRESSURE PLATE (MONO)



42 GLASS STOP (MONO)

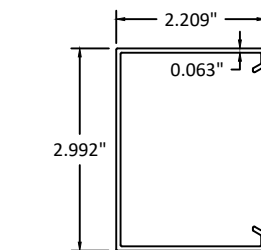
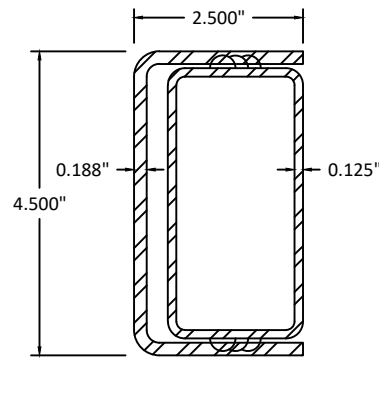
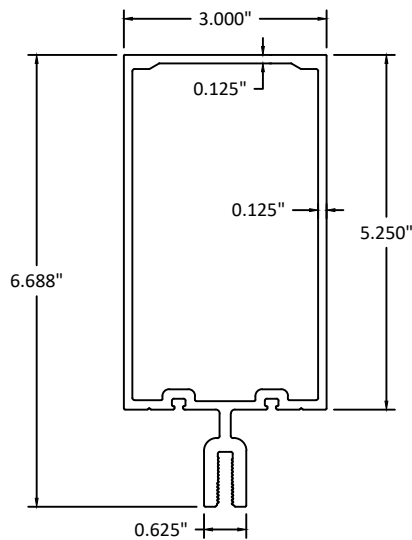


47 GLAZING ADAPTOR (MONO)

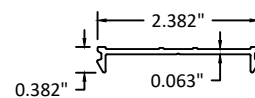


44 PERIMETER FACE COVER (INS)

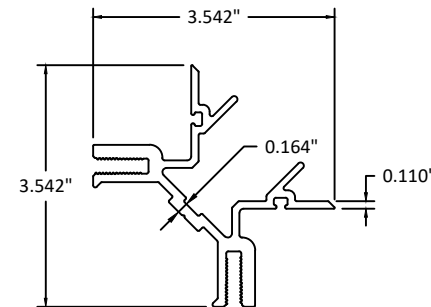
48 FRAME HORIZONTAL (INSULATING)



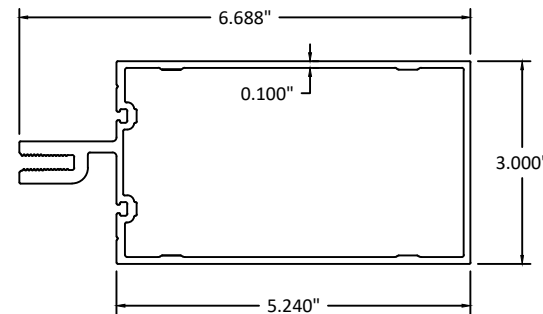
60 90° CORNER INTERIOR COVER



61 INTERIOR COVER BASE

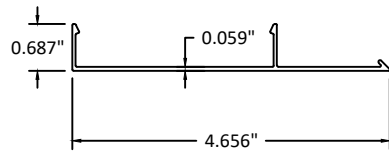


49 90° CORNER ADAPTOR (INS)



64 HORIZONTAL (INS)

50 90° CORNER PRESSURE PLATE (INS)



51 90° CORNER FACE COVER (INS)

53 CORNER MULLION (INS)

59 STEEL REINFORCEMENT ASSEMBLY



YKK AP AMERICA, Inc.
1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

COMPONENTS

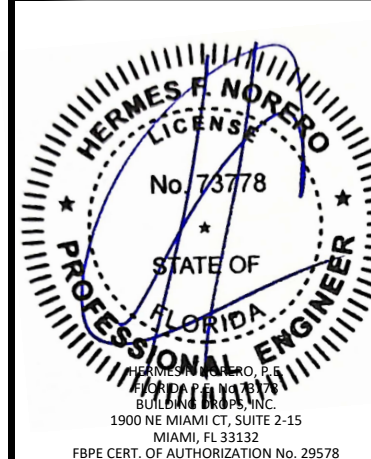
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



FL #:
FL14217

DATE: **07.31.17**

DWG. BY: **AR/RV** CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **YKK211**

SECTION

9.1

[Page 46 of 48]

c:\users\lucianosanchez\building drops, inc\building drops\landing - documents\common\projects\ykk ap america, inc\fc-21-1229-1 - fbc submittal - revisions\dwgs\apc - upload\014217\hvhb\ykk 211 - f114217.dwg 9 - components & bom.dwg 6/2/2026 11:55 AM

BILL OF MATERIALS			
ITEM	PART NO.	DESCRIPTION	MATERIAL
1	E9-3115	HEAD (MONO)	6063-T5
2	E9-3114	HORIZONTAL (MONO)	6063-T5
3	E9-3116	SILL (MONO)	6063-T5
4	E9-3118	JAMB (MONO)	6063-T5
5	E9-3108	VERTICAL MULLION (MONO)	6063-T6
6	E9-3137	GLASS STOP	6063-T5
7	E9-3170	PERIMETER FACE COVER (MONO)	6063-T5
8	E9-3168	HORIZONTAL SNAP COVER	6063-T5
9	E9-3161	FACE COVER	6063-T5
10	E9-3162	FLUSH FILLER	6063-T5
11	E1-3019	SHEAR BLOCK	6063-T5
12	E1-3005	MULLION SPLICE SLEEVE (6" LONG)	6063-T5
13	E1-3006	MULLION ANCHOR SLEEVE (3" LONG)	6063-T5
14	E1-3007	MULLION REINFORCEMENT SLEEVE (29" LONG)	6063-T5
15	E1-3004	JAMB F ANCHOR (STD)	6063-T5
16	E1-3003	MULLION T ANCHOR (STD)	6061-T6
17	E1-0187	STEEL TUBE (2" X 4" X 1/8")	A36 STEEL
18	E1-0186	STEEL CHANNEL (2-5/16" X 4-1/4" X 3/16")	A36 STEEL
19	E1-0175	REINFORCEMENT CHANNEL (2-1/2" X 4-1/2" X 3/16")	A36 STEEL
19A	-	CHANNEL AT CORNER MULLION	A36 STEEL
20	E2-0351	EXTERIOR PUSH-IN GASKET (9/16", 1-5/16" GL)	EPDM
21	E2-0352	EXTERIOR PUSH-IN GASKET (3/16", 7/16" GL)	EPDM
22	E2-0359	PUSH-IN SPACER	SCR900
23	E2-0364	SETTING BLOCK (MONO)	EPDM (85±5)
24	E3-0103	NYLON SLIP PAD	NYLON
25	E3-0037	THERMAL ISOLATOR	POLYACETAL
26	E2-0374	JOINT PLUG (MONO)	EPDM SPONGE
27	E1-3039	S ANCHOR	6063-T6
28	PC-1210	#12 X 5/8" PHSMS TYPE AB	ZINC PLATED STEEL
29	FC-1012	#10 X 3/4" FHSMS TYPE AB	ZINC PLATED STEEL
30	FC-1220	#12 X 1-1/4" FHSMS TYPE AB	ZINC PLATED STEEL
31	PC-1010	#10 X 5/8" PHSMS TYPE AB	ZINC PLATED STEEL
32	PC-1208	#12 X 1/2" PHSMS TYPE AB	ZINC PLATED STEEL
33	HF-2528-W1	#1/4"-20 X 1-3/4" HWHs TYPE F	ZINC PLATED STEEL
34	E9-3103	CORNER MULLION (MONO)	6063-T6
35	E9-3146	90° CORNER ADAPTOR (MONO)	6063-T5
36	AS-3136	90° CORNER PRESSURE PLATE (MONO)	6063-T5

BILL OF MATERIALS			
ITEM	PART NO.	DESCRIPTION	MATERIAL
37	E9-3164	90° CORNER FACE COVER (MONO)	6063-T5
38	E9-3166	FLUSH POCKET FILLER (MONO)	6063-T5
39	E2-0361	WEDGE GASKET	EPDM
40	E2-0239	ISOLATOR TAPE	PVC SPONGE
41	E9-3124	HEAD (INS)	6063-T5
42	E9-3139	GLASS STOP (MONO)	6063-T5
43	E9-3125	SILL (INS)	6063-T5
44	E9-3171	PERIMETER FACE COVER (INS)	6063-T5
45	E9-3121	VERTICAL MULLION (INS)	6063-T6
46	E9-3122	JAMB (INS)	6063-T5
47	E9-3147	GLAZING ADAPTOR (MONO)	6063-T5
48	E9-3123	HORIZONTAL (INS)	6063-T5
49	E9-3145	90° CORNER ADAPTOR (INS)	6063-T5
50	AS-3135	90° CORNER PRESSURE PLATE (INS)	6063-T5
51	E9-3163	90° CORNER FACE COVER (INS)	6063-T5
52	E2-0360	EXTERIOR GLAZING GASKET (1/4", 5/16", 1" GL)	EPDM
53	E9-3101	CORNER MULLION (INS)	6063-T6
54	E2-0356	ISOLATOR TAPE	PVC SPONGE
55	E2-0363	SETTING BLOCK (INS)	EPDM
56	E2-0384	JOINT PLUG (INS)	EPDM SPONGE
57	E2-0353	INTERIOR GLAZING SILICONE SPACER	EPDM
58	E1-3001	SHEAR BLOCK	6063-T5
59	E1-0188	STEEL REINFORCEMENT ASSEMBLY	A36 STEEL
60	E9-3165	90° CORNER INTERIOR COVER	6063-T5
61	E9-1280	90° CORNER INTERIOR COVER BASE	6063-T5
62	AS-3143	PERIMETER PRESSURE PLATE (INS)	6063-T5
63	E9-3169	POCKET FILLER (INS)	6063-T5
64	E9-3102	HORIZONTAL (INS)	6063-T5
65	E9-3160	90° CORNER INTERIOR COVER	6063-T6
66	PC-1008	#10 X 1/2" PHSMS TYPE AB	ZINC PLATED STEEL
67	HF-2510-W1	#1/4"-20 X 5/8" HWHs TYPE F	ZINC PLATED STEEL
68	FS-1012	#10 X 3/4" FHTs (TEK)	ZINC PLATED STEEL
69	E1-1204	WINDLOAD ANCHOR	A36 STEEL
70	PC-1208	#12 X 1/2" PHSMS TYPE AB	ZINC PLATED STEEL
71	HM-5072	1/2"-13 X 4-1/2" HHMS BOLT (GR 5)	ZINC PLATED STEEL
72	HM-5000	1/2"-13 NUT HHMS	ZINC PLATED STEEL
73	WS-5000	1/2" LOCK WASHER	ZINC PLATED STEEL

BILL OF MATERIALS			
ITEM	PART NO.	DESCRIPTION	MATERIAL
74	WW-5000	1/2" FLAT WASHER	ZINC PLATED STEEL
75	-	1/2"-13 HHMS BOLT (GRADE 5) OF SUFFICIENT LENGTH TO ACHIEVE FULL ENGAGEMENT W/ NUT SAE GR5 OR ASTM A325	SAE GR.5 OR ASTM A325"
76	E1-3020	MULLION END CAP (INS)	ALUM SHEET
77	E1-3021	MULLION END CAP (MONO)	ALUM SHEET
78	FC-1024	#10 X 1-1/2" FHSMS TYPE AB	ZINC PLATED STEEL
79	FC-1212	#12 X 3/4" FHSMS TYPE AB	ZINC PLATED STEEL
80	TEK-1012	#10-16 X 3/4" TEK HWHs	ZINC PLATED STEEL
81	E1-3018	MULLION ANCHOR FOR 90° CORNER	-
82	E1-1205	DEADLOAD ANCHOR	A36 STEEL
83	-	WINDLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
84	-	DEADLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
85	-	WINDLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
86	-	DEADLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
87	-	WINDLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
88	-	DEADLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
89	-	WINDLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
90	-	DEADLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
91	-	WINDLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
92	-	DEADLOAD ANCHOR (STD MULLION)(NOT BY YKK AP)	A36 STEEL
93	E9-9302	1" X 1" X 1/8" ANGLE	6063-T5
94	E9-9303	1-1/2" X 1-1/2" X 1/8" ANGLE	6063-T5
95	E1-3016	90° CORNER SHEAR CLIP (RH)	6063-T5
96	E1-3017	90° CORNER SHEAR CLIP (LH)	6063-T5
97	HD-2520-W3	1/4"-20 X 1-1/4" HWHMS	ZINC PLATED STEEL
98	HM-2516-W3	#1/4"-20 X 1" HWHMS	ZINC PLATED STEEL
99	FF-0808	#8-32 X 1/2" FHMS TYPE F	ZINC PLATED STEEL



Quality
inspires™

YKK AP AMERICA, Inc.

1229 HWY 441 BYPASS
DUBLIN, GEORGIA 31021
PH: (478)277-1955 FAX: (678)838-6001

TITLE:
YHC 300 IG CURTAIN WALL SYSTEM
(HVHZ) (IMPACT)

BILL OF MATERIALS

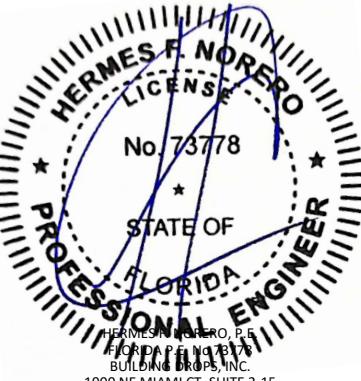
PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
DETAIL REVISION	MS	MAR./22
MISC. UPDATES	LS	6.02.26

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT



HERMES F. NORERO, P.E.
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
FL14217

DATE:
07.31.17

DWG. BY:
AR/RV

CHK. BY:
HFN

SCALE:
NTS

DWG. #:
YKK211

SECTION
9.3
[Page 48 of 48]