

10/14/2020 - 12:00pm	Francisco	C:\Users\Francisco\Engineering\Express\Production - Documents\Projects\20-23341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 EBC\20-29341 - FL22982.5 - DWG5.dwg
----------------------	-----------	---



- 1

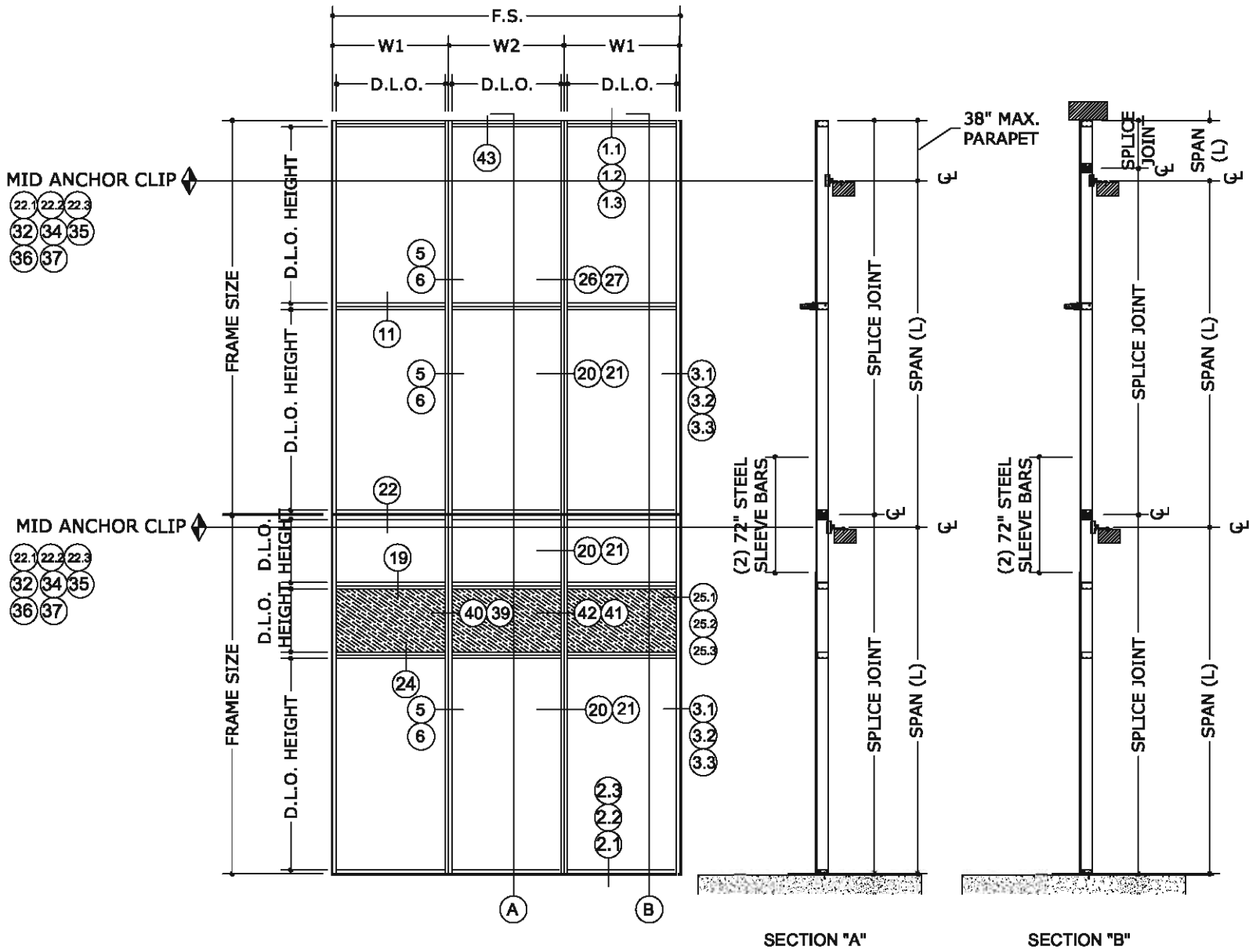
C:\Users\Francisco\Engineering\Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:00pm Francisco

INSTRUCTIONS TO DETERMINE
DESIGN PRESSURE RATING

STEP 1: USE THE GLASS LOADING TABLES
TO DETERMINE THE ALLOWABLE
PRESSURE OF THE GLASS.

STEP 2: USE THE MULLION LOADING TABLE
TO DETERMINE THE ALLOWABLE
PRESSURES FOR THE MULLIONS.

STEP 3: THE MINIMUM VALUE BETWEEN
STEP 1 AND STEP 2 WILL DETERMINE THE
DESIGN LOAD PRESSURE FOR THIS
SYSTEM.



TYPICAL MULTI-SPAN ELEVATIONS
WITH OR WITHOUT HORIZONTAL MULLIONS

MULLION TRIBUTARY WIDTH
$$W = \frac{W1}{2} + \frac{W2}{2}$$

NOTE:
ALTERNATIVE MID ANCHOR SLEEVE CAN BE
DESIGN UNDER SITE SPECIFIC ENGINEERING
SUPPORTED BY PRODUCT TEST DATA.

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

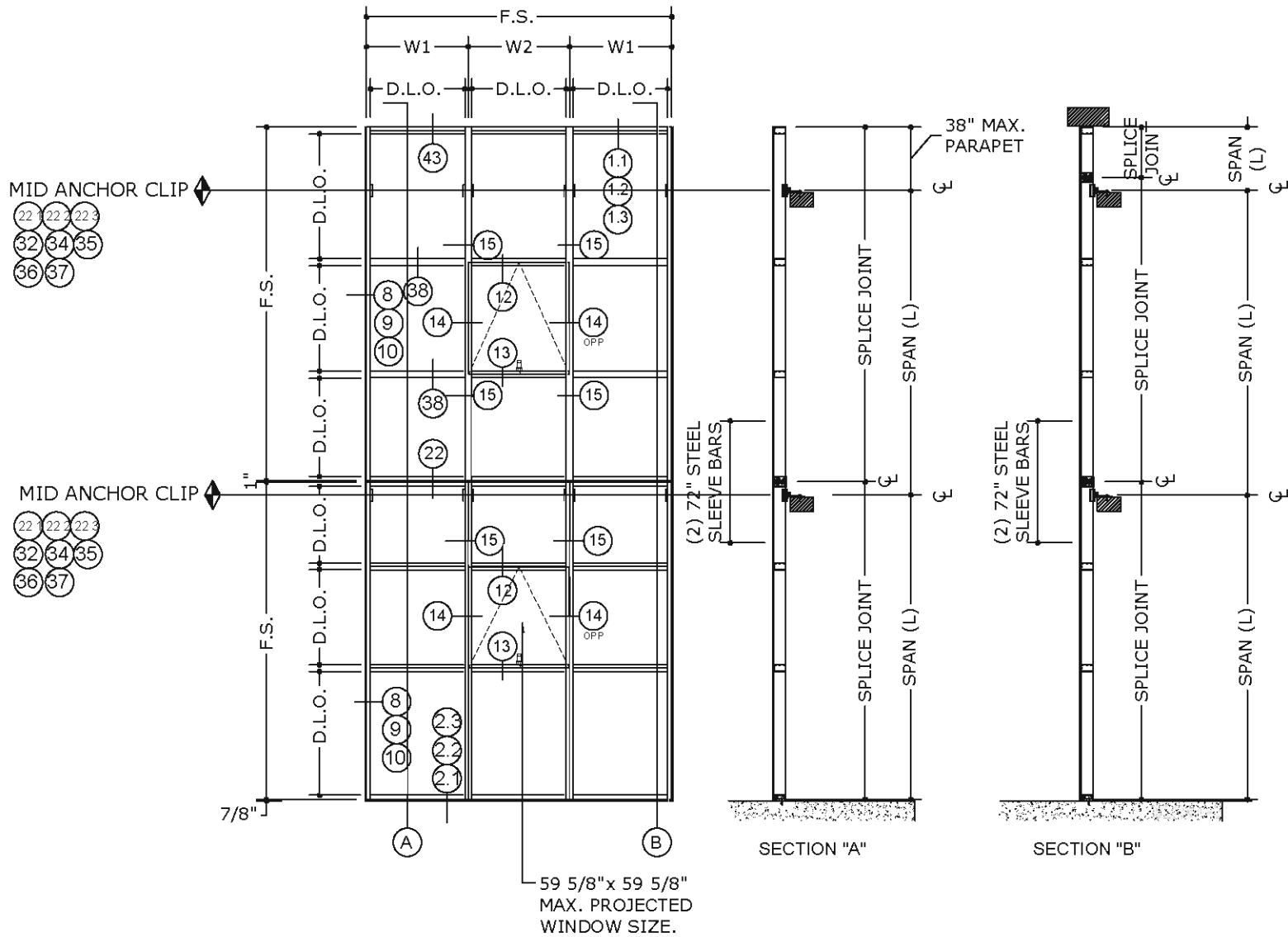
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:00pm Francisco

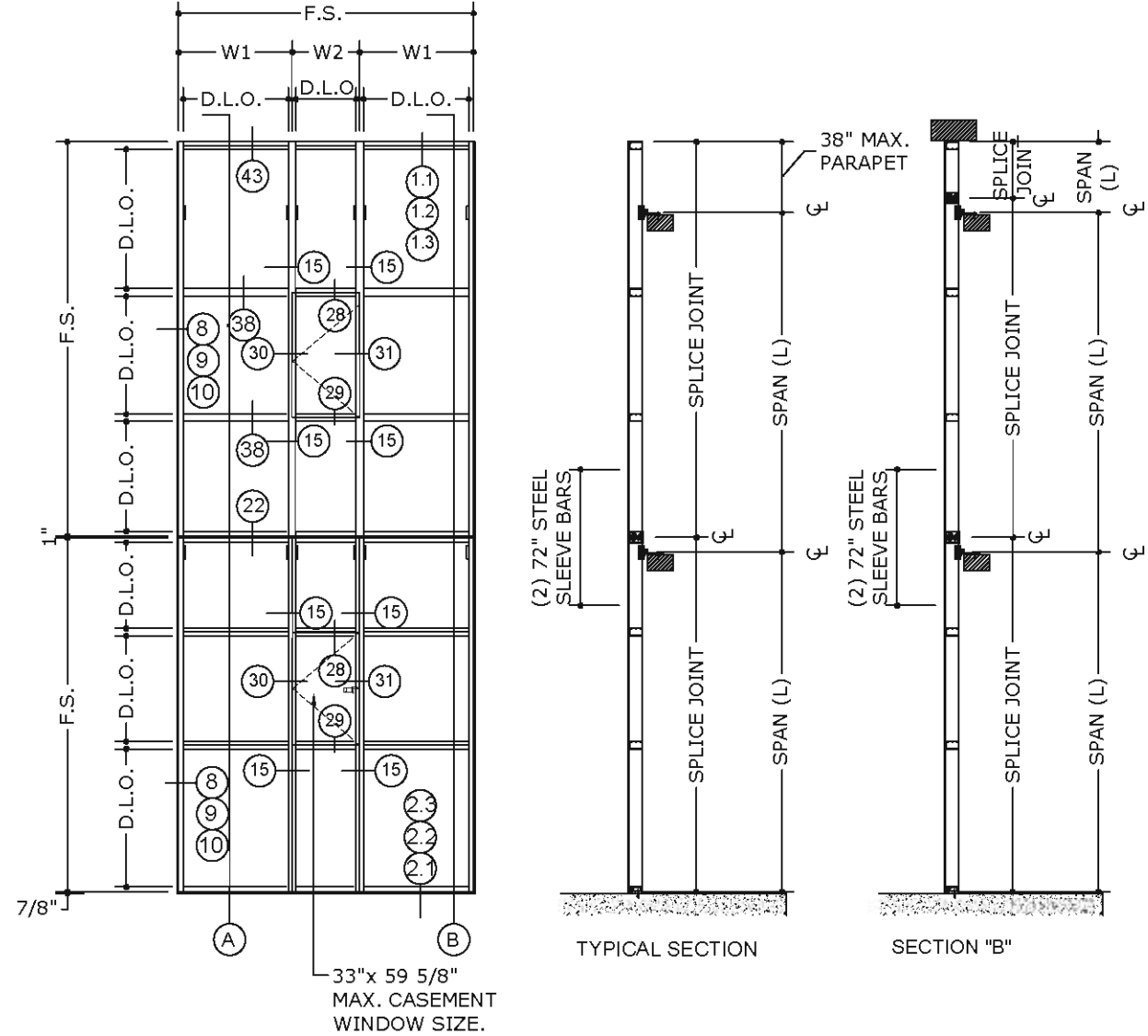


TYPICAL MULTI-SPAN ELEVATIONS

WITH PROJECTED WINDOW

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$



TYPICAL MULTI-SPAN ELEVATIONS

WITH CASEMENT WINDOW

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

NOTE:
ALTERNATIVE MID ANCHOR SLEEVE CAN BE DESIGN UNDER SITE SPECIFIC ENGINEERING SUPPORTED BY PRODUCT TEST DATA.

NOTE:
OPERABLE WINDOWS MAY BE USED ON SINGLE SPAN AND MULTI-SPAN APPLICATIONS.

CASEMENT AND PROJECTED WINDOW SIZES OTHER THAN THE ONES SHOWN CAN BE DESIGNED UNDER SITE SPECIFIC ENGINEERING.

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

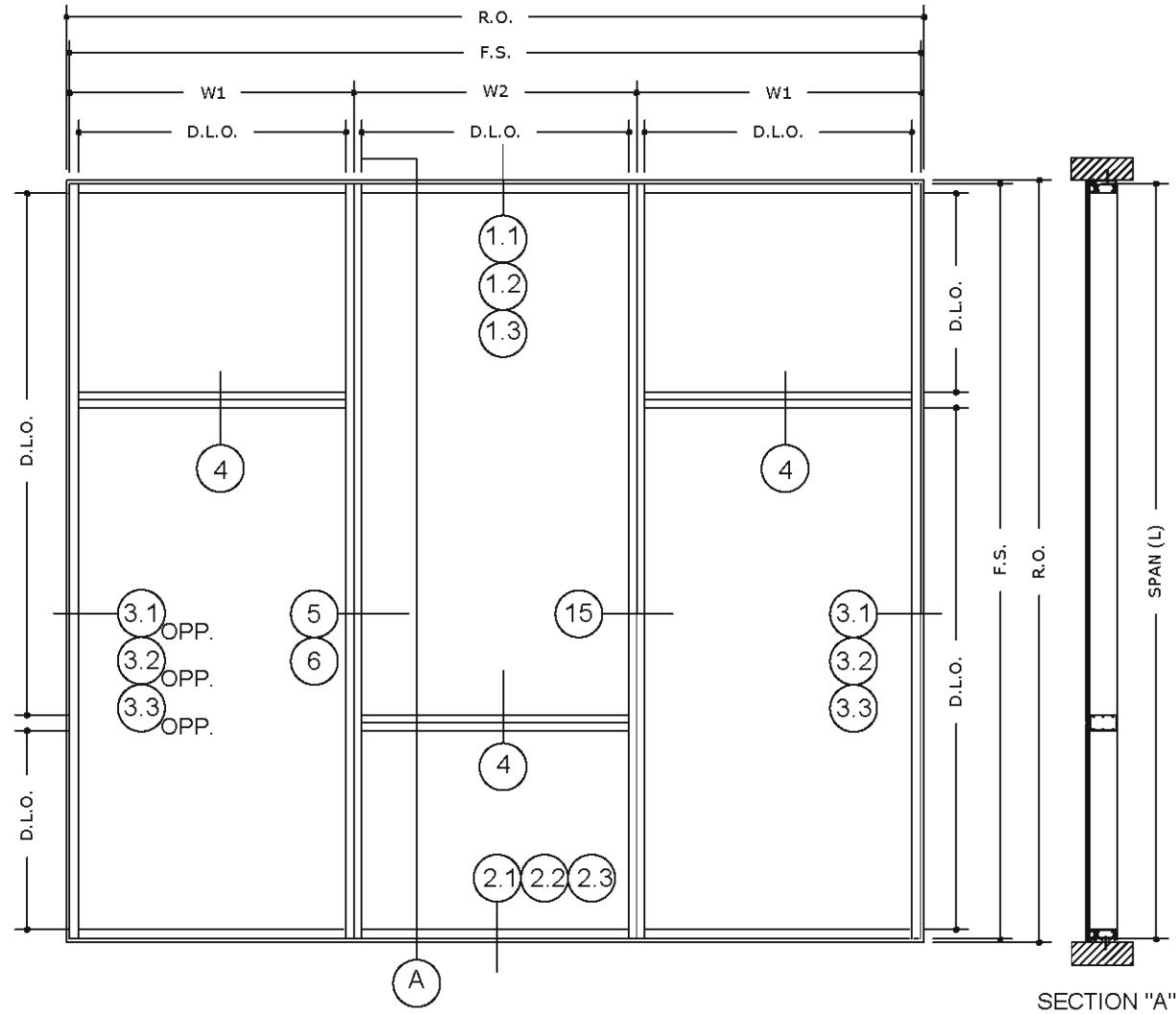
20-29341

SCALE: NTS UNLESS NOTED

3

OF 64

C:\Users\Francisco\Engineering\Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg
10/14/2020 - 12:00pm Francisco



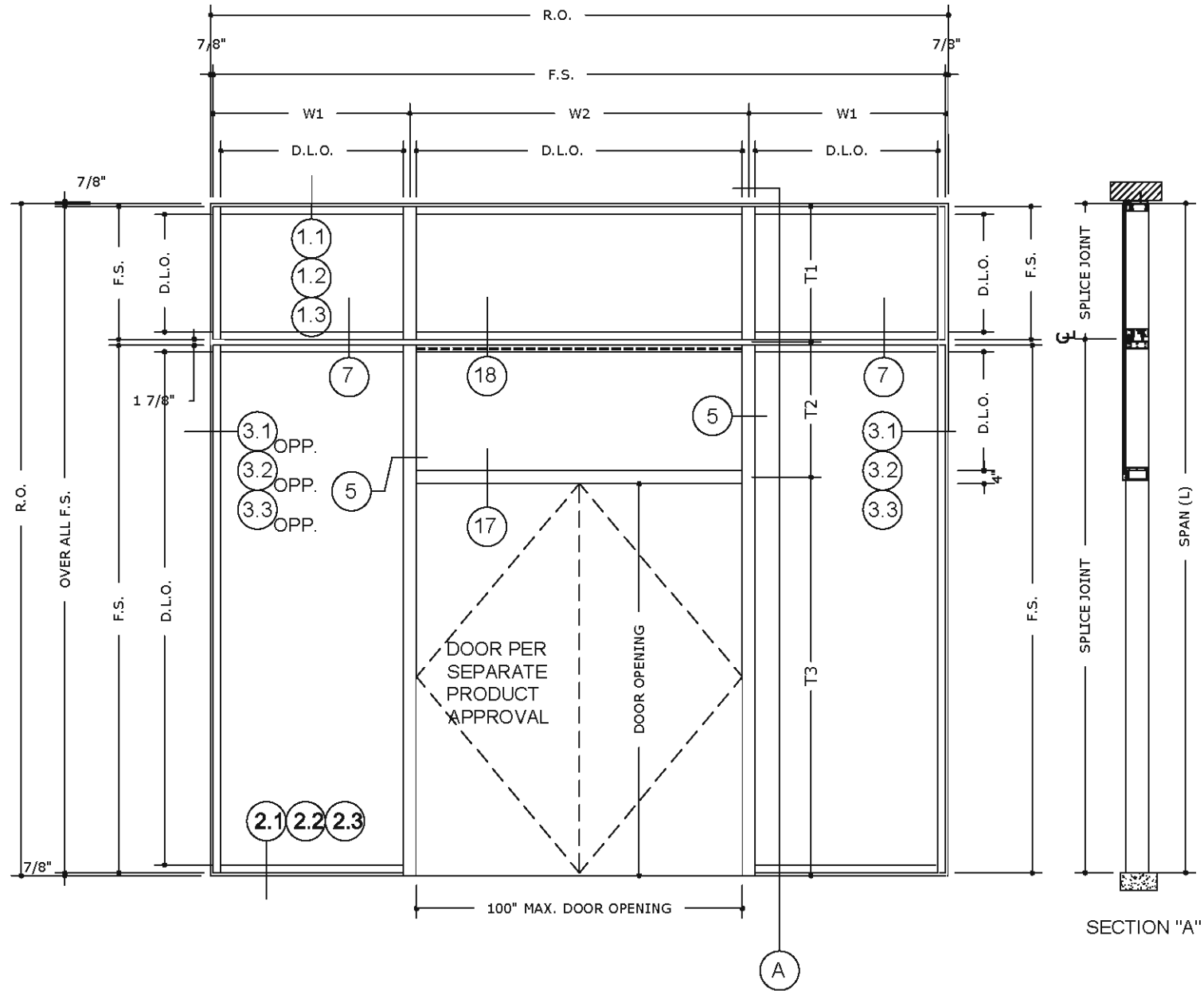
TYPICAL SINGLE SPAN ELEVATION

WITH OR WITHOUT HORIZONTAL MULLIONS

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

NOTE:
OPERABLE WINDOWS MAY BE USED ON SINGLE SPAN AND MULTI-SPAN APPLICATIONS. REFER TO MULTI-SPAN ELEVATIONS FOR OPERABLE WINDOWS MAXIMUM SIZES AND DETAIL CALL-OUTS.



TYPICAL ELEVATION

WITH DOOR OPTION

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

MAXIMUM DOOR HEADER (DETAIL 17) VERTICAL TRIBUTARY DIMENSION = 80 7/8" MAX.

$$T = \frac{T2 + T3}{2}$$

MAXIMUM SPLICE JOINT (DETAIL 18) VERTICAL TRIBUTARY DIMENSION = 41 1/2" MAX.

$$T = \frac{T1 + T2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065

(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

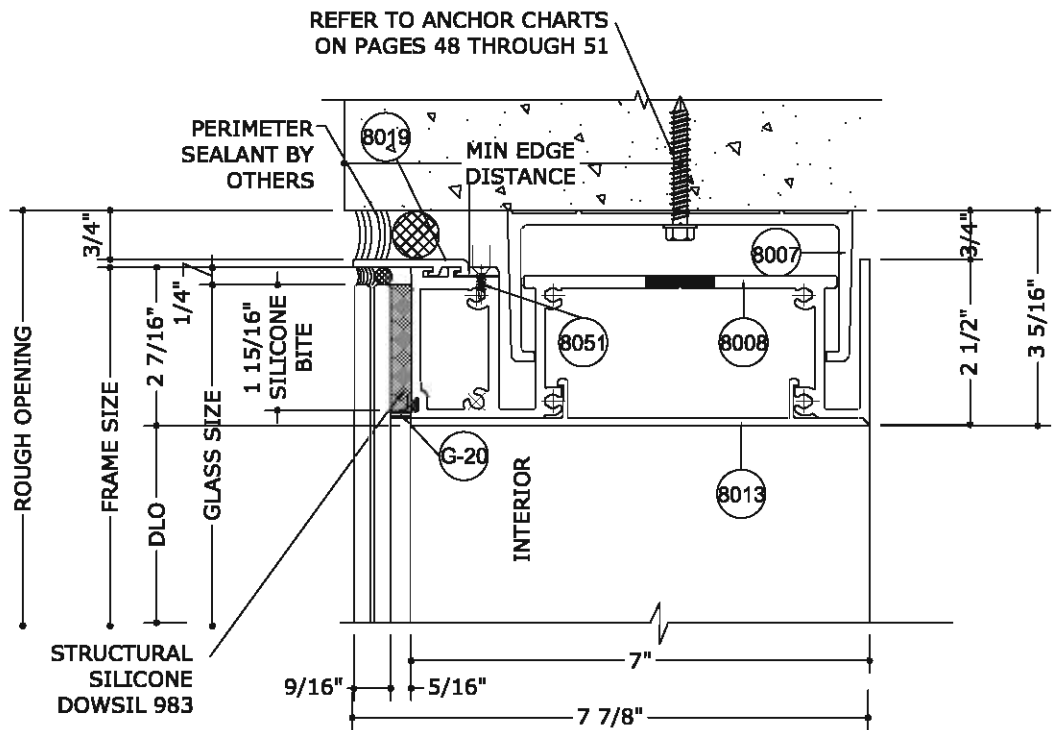
COPYRIGHT ENGINEERING EXPRESS®

20-29341

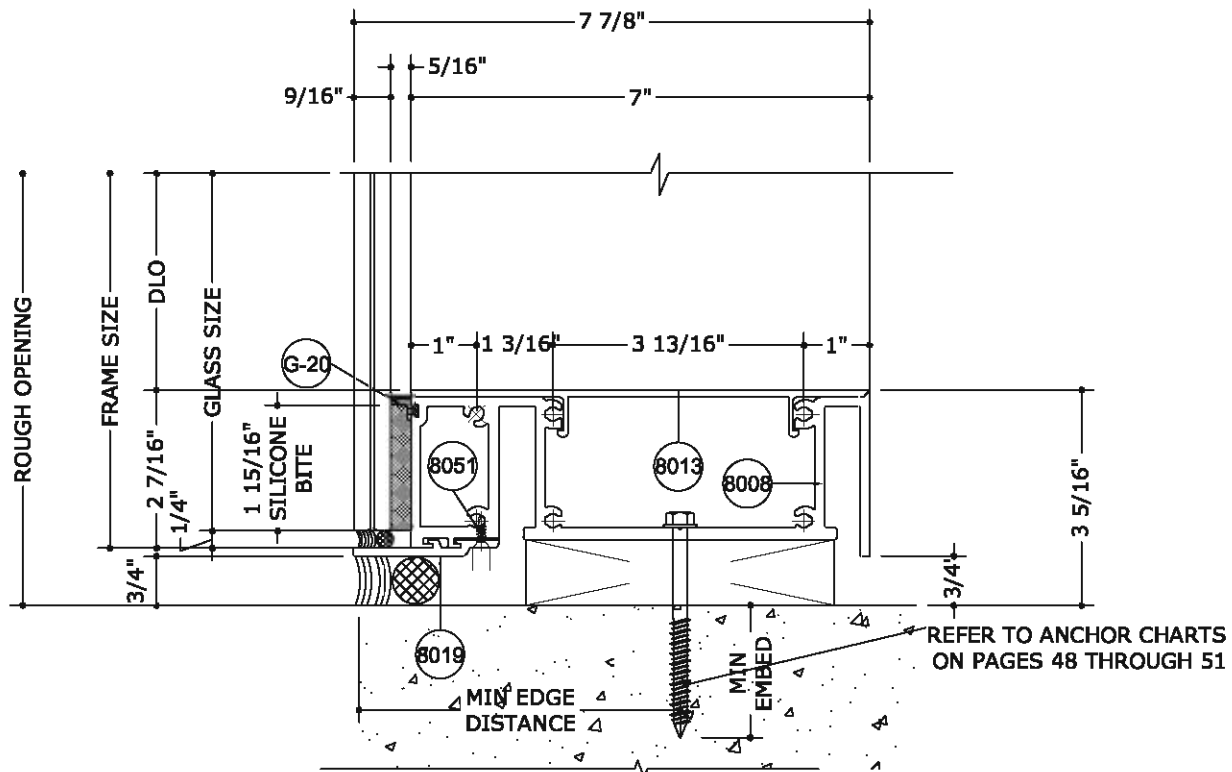
SCALE: NTS UNLESS NOTED

4 OF 64

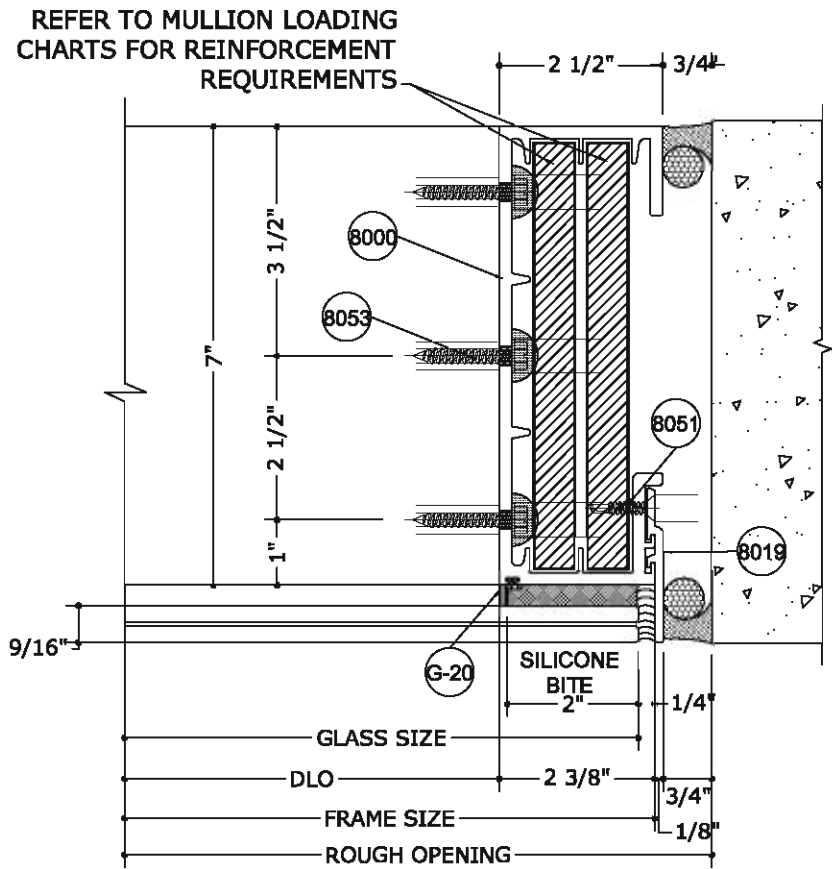
C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP1\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:00pm Francisco



1.1 HEAD DETAIL (CONCRETE)
N.T.S



2.1 SILL DETAIL (CONCRETE)
N.T.S



3.1 JAMB DETAIL (CONCRETE)
N.T.S

MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
UP TO 96"	1/4"	3/4"
UP TO 120"	3/8"	3/4"
UP TO 144"	7/16"	3/4"

FRANK BENARDO, PE
PE# 0046549 CA# 9885

10/15/2020

ENGINEERING EXPRESS

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

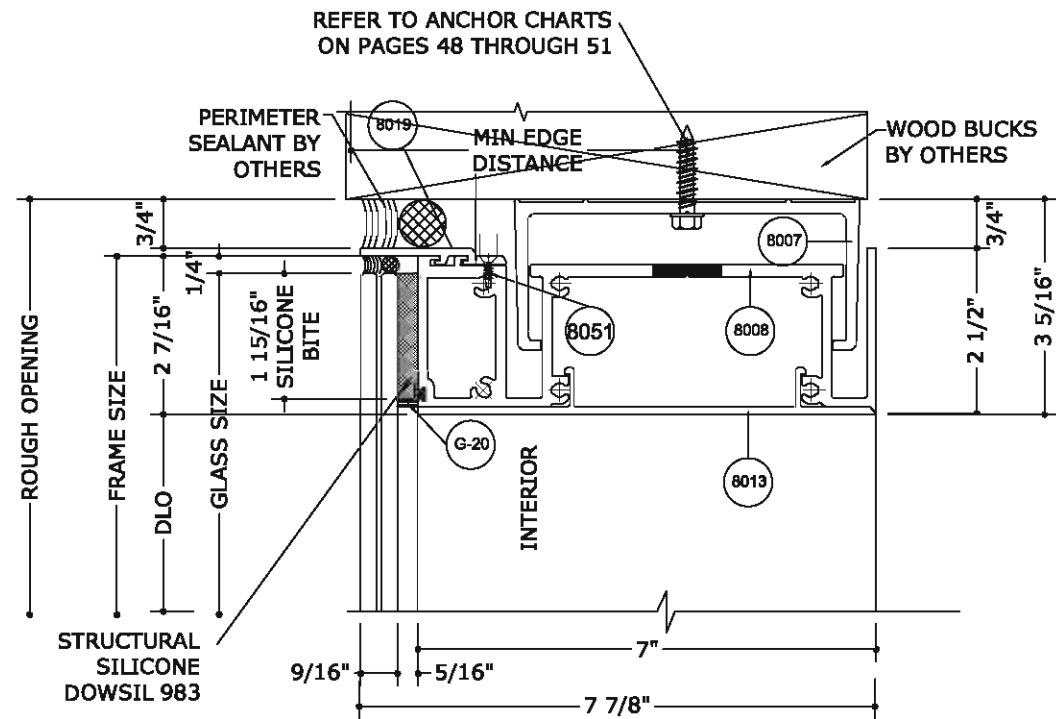
COPYRIGHT ENGINEERING EXPRESS®

20-29341

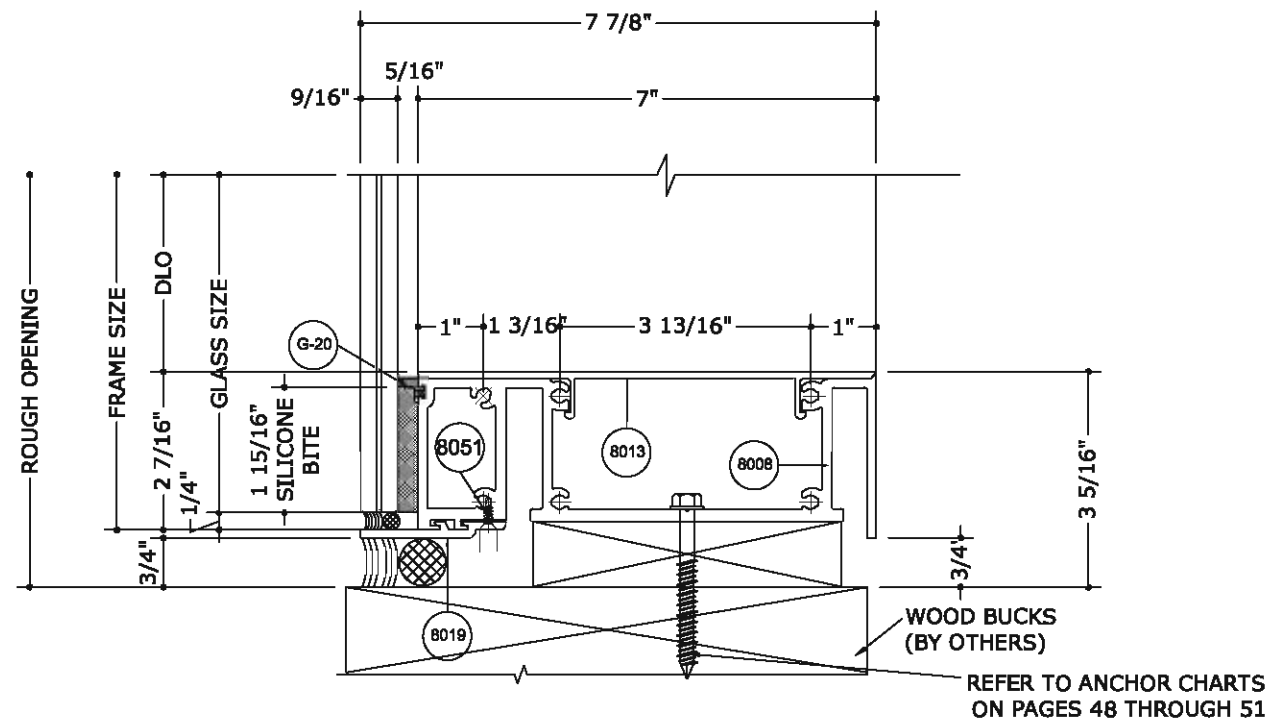
SCALE: NTS UNLESS NOTED

5 OF 64

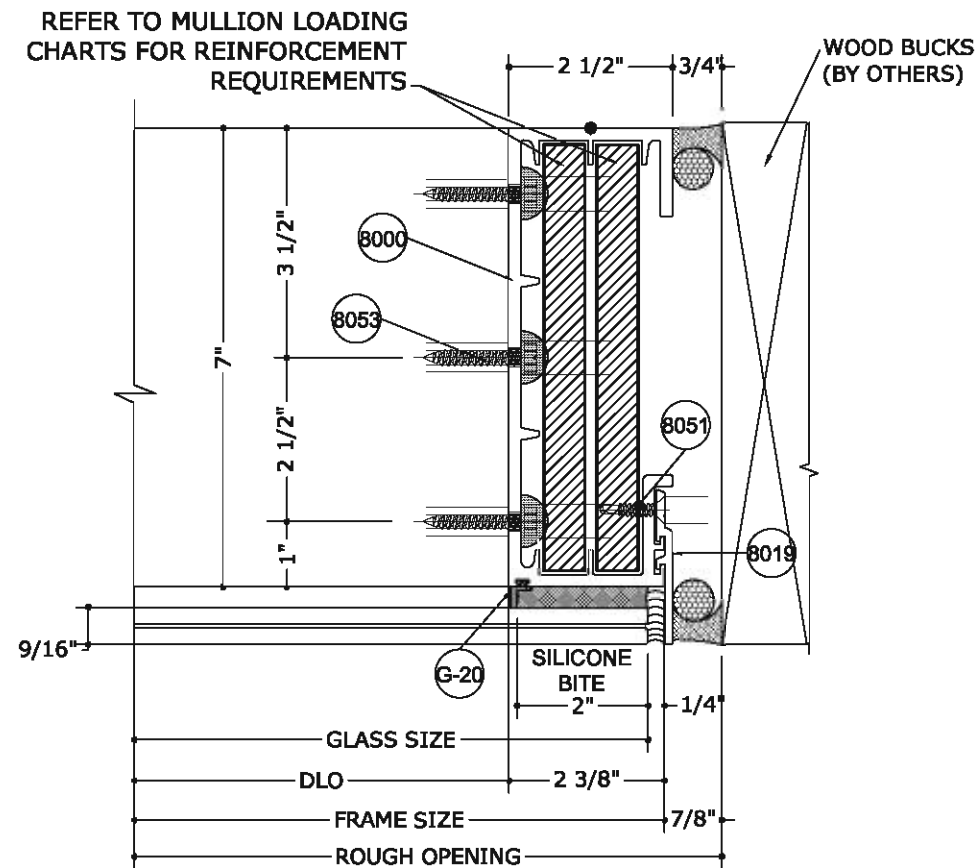
C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:00pm Francisco



1.2 HEAD DETAIL (WOOD)
N.T.S



2.2 SILL DETAIL (WOOD)
N.T.S



3.2 JAMB DETAIL (WOOD)
N.T.S

MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
UP TO 96"	1/4"	3/4"
UP TO 120"	3/8"	3/4"
UP TO 144"	7/16"	3/4"

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

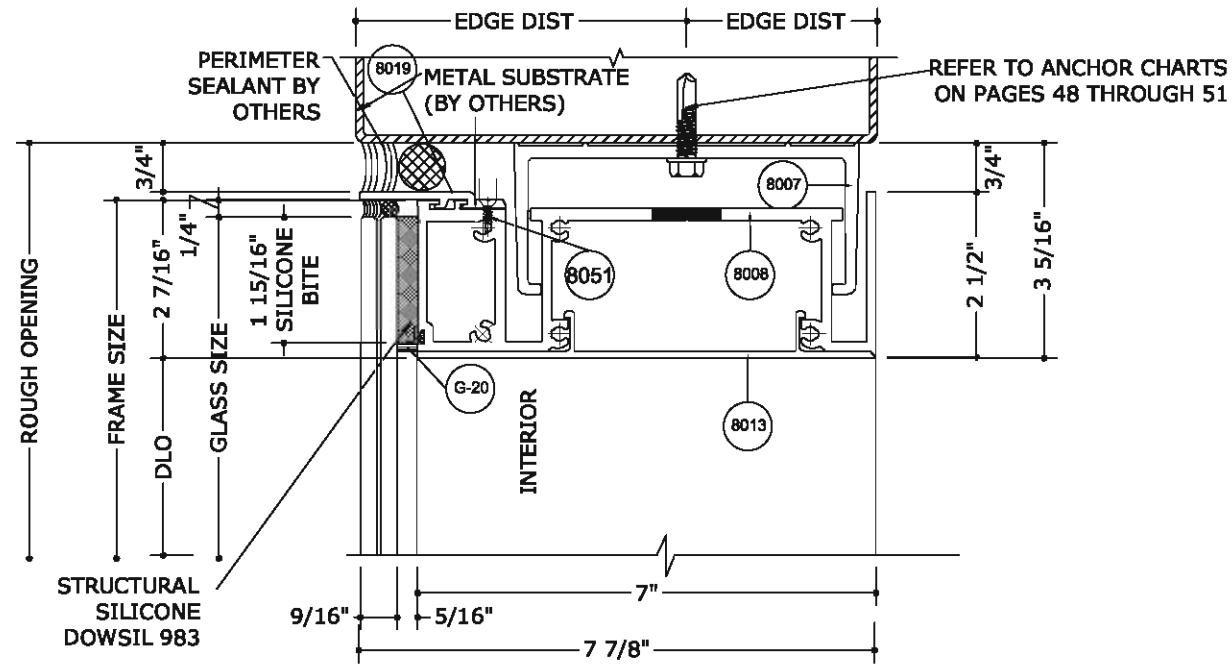
COPYRIGHT ENGINEERING EXPRESS®

20-29341

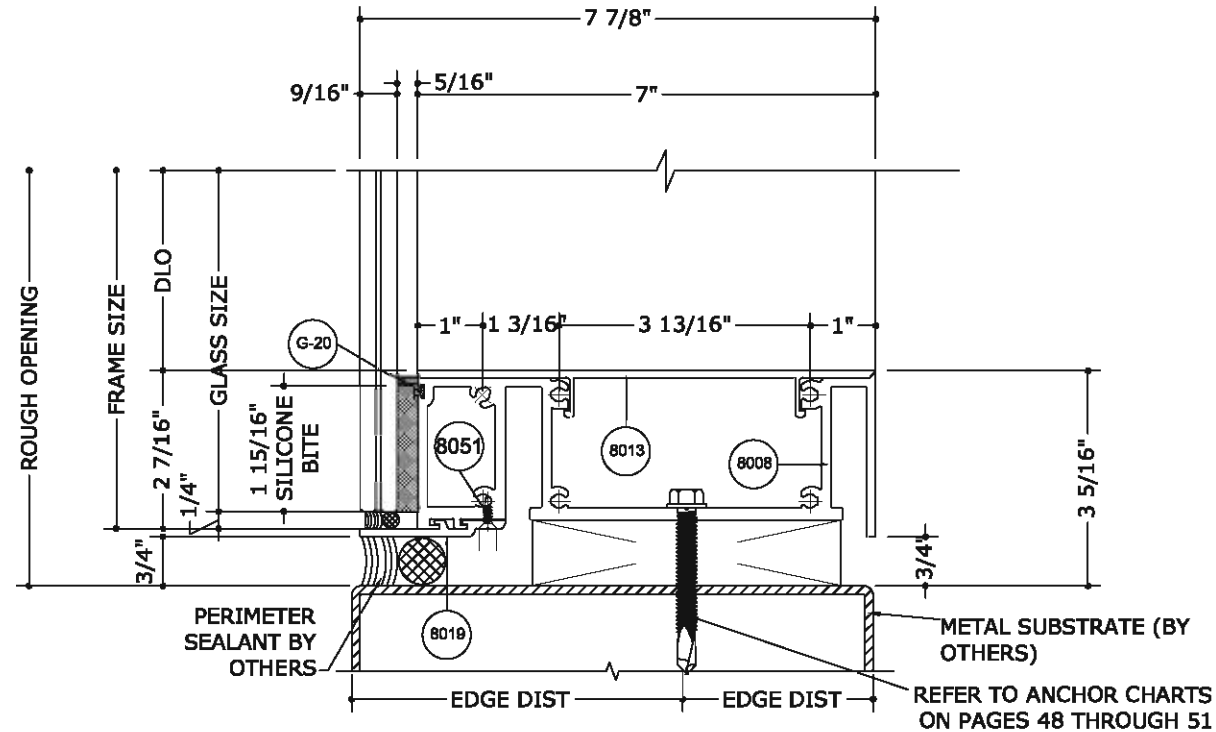
SCALE: NTS UNLESS NOTED

64

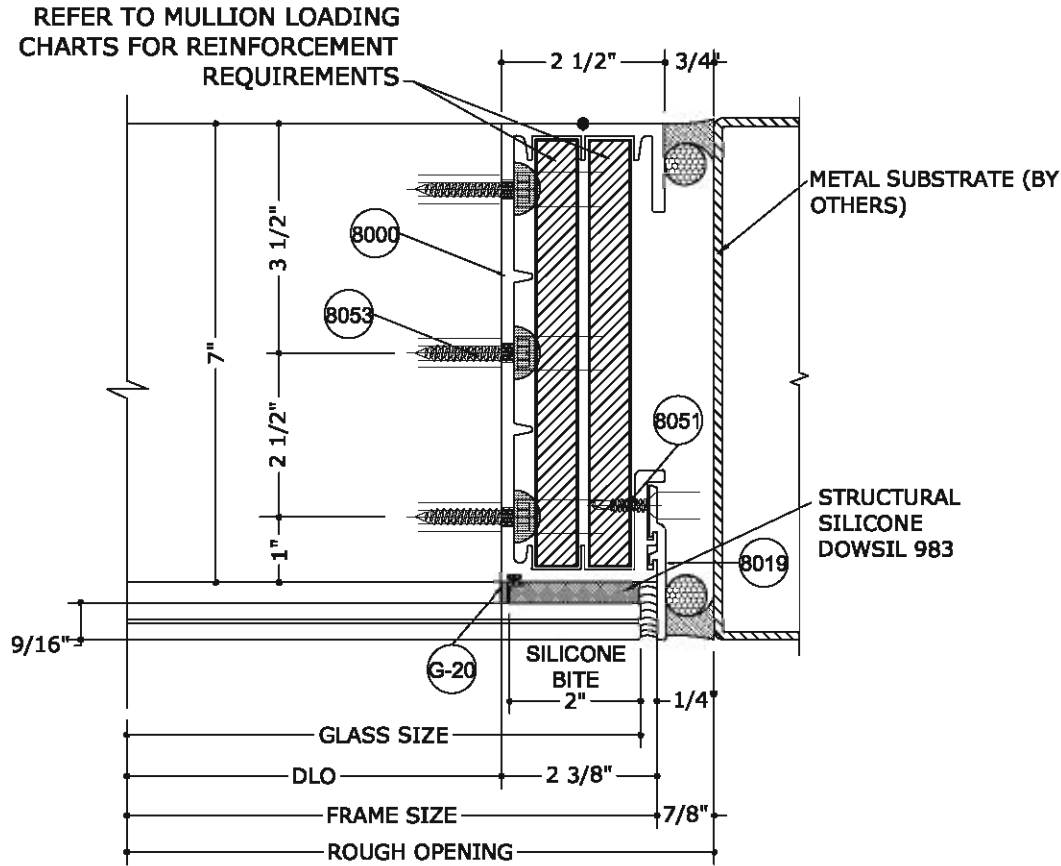
C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:00pm Francisco



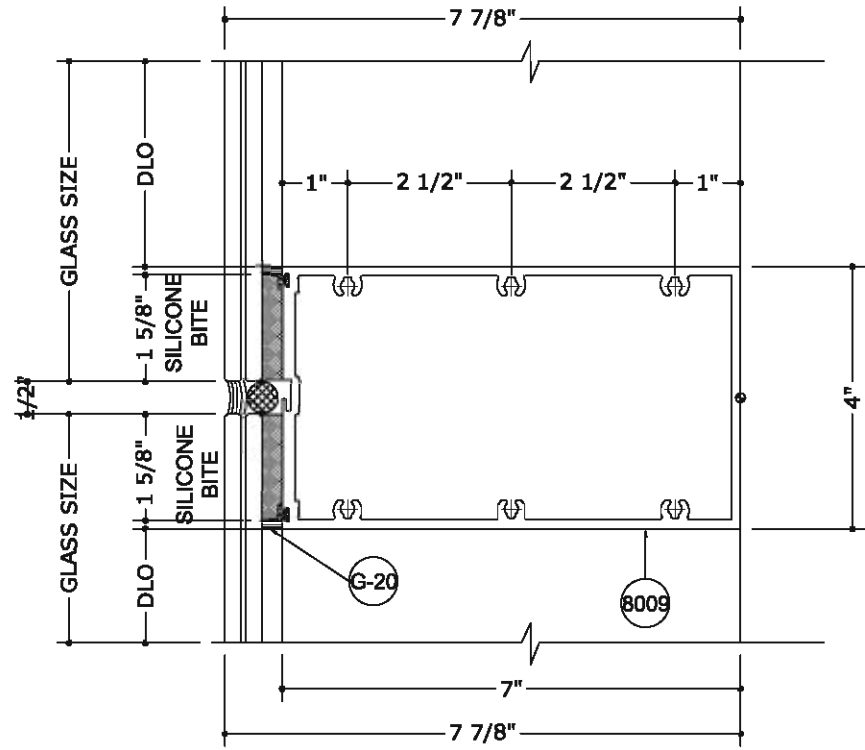
1.3 HEAD DETAIL (METAL)
N.T.S



2.3 SILL DETAIL (METAL)
N.T.S



3.3 JAMB DETAIL (METAL)
N.T.S



4 HORIZONTAL DETAIL
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

7 OF 64

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	INIT ISSUE	JEM	AJP	DRWN	CHKD	DATE
	2020/FEB					06/21/19
		CCB	AJP			10/13/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS, AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALL ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

20-29341

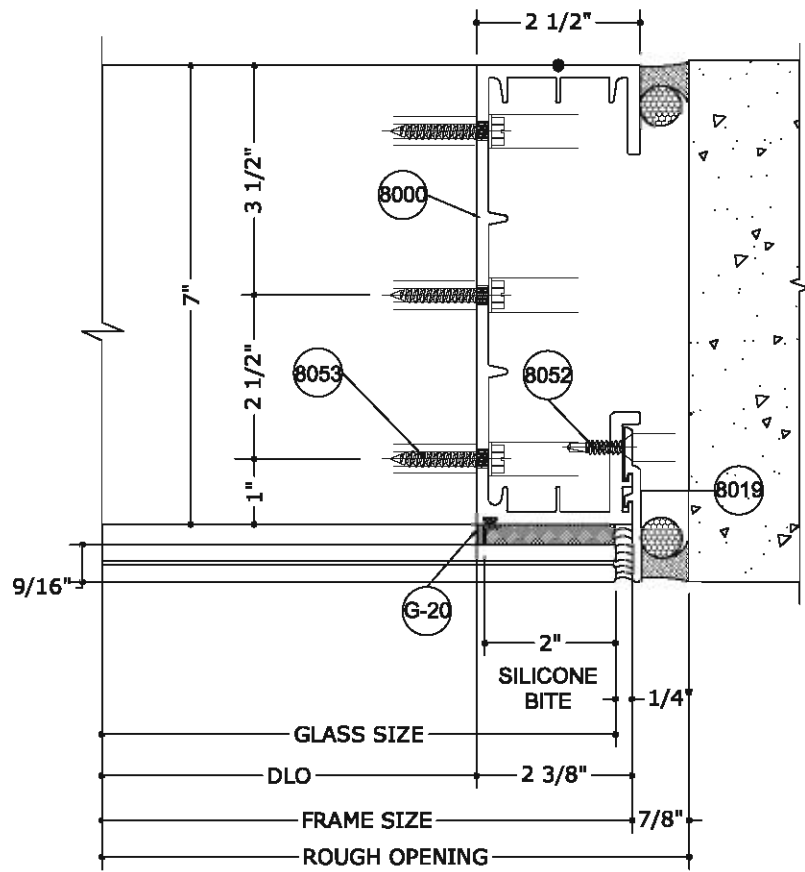
SCALE: NTS UNLESS NOTED

8

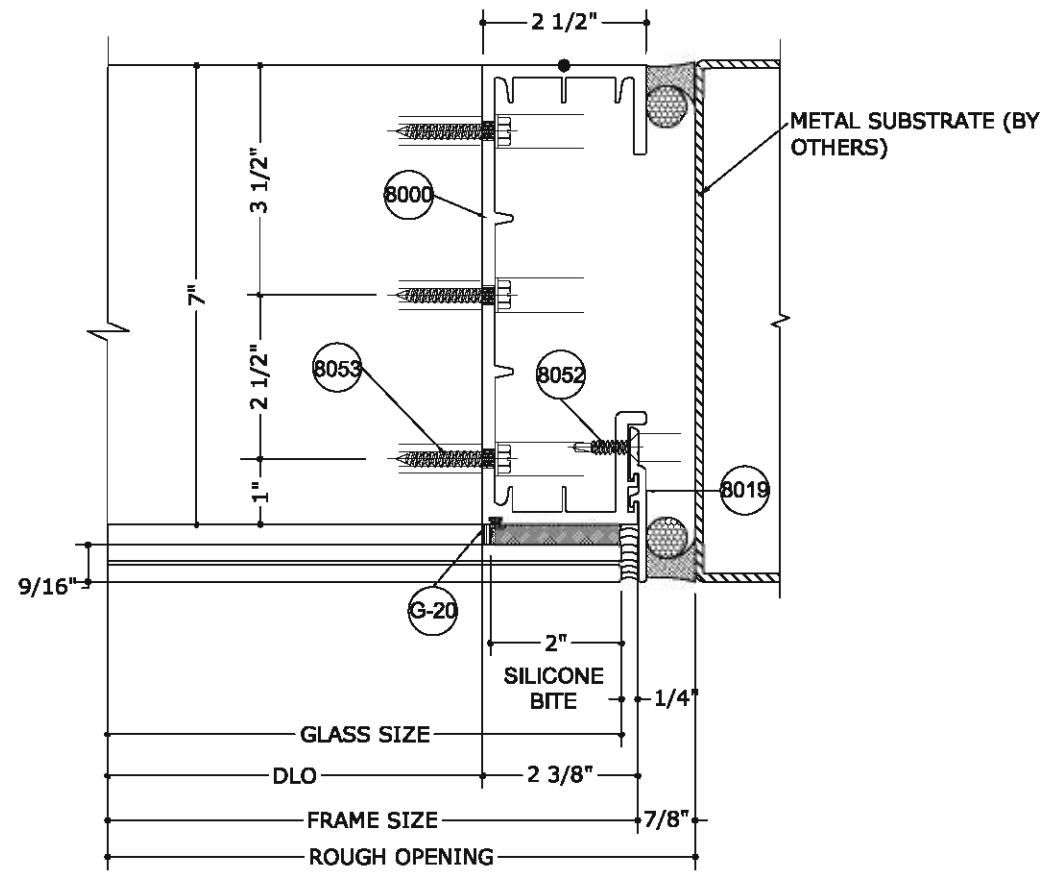
OF
64



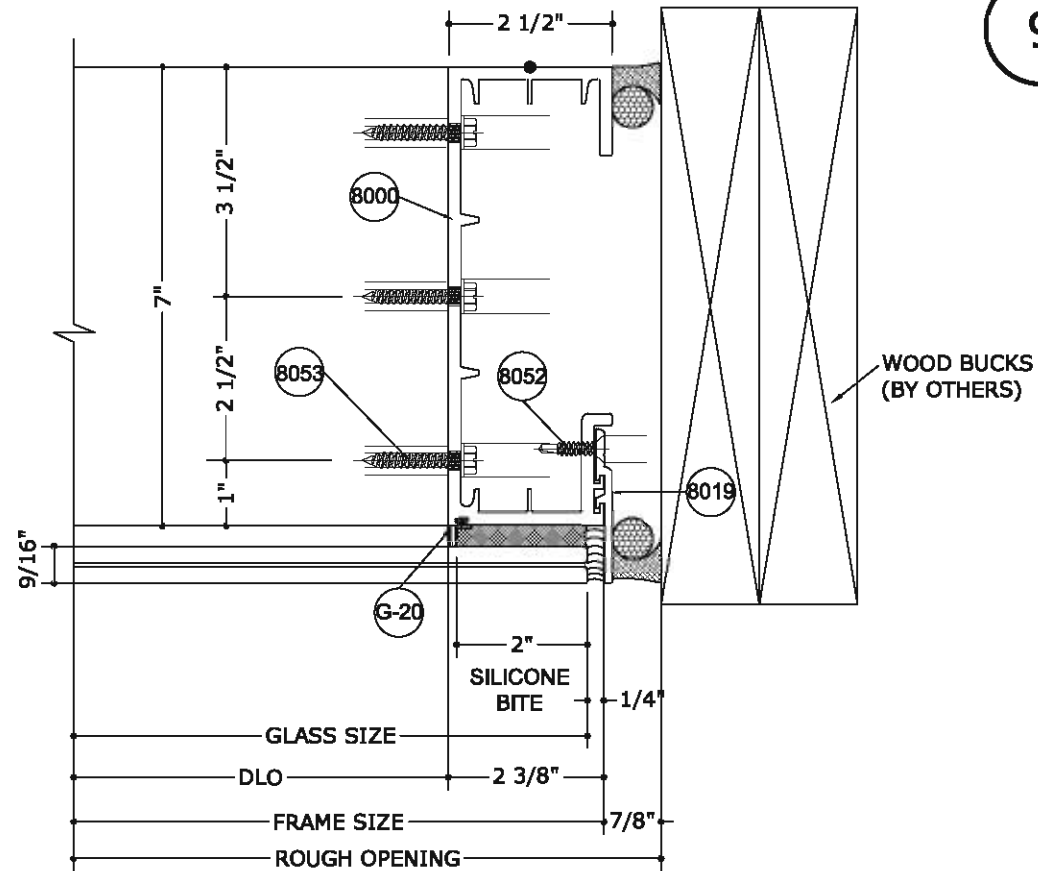
C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:00pm Francisco



8 JAMB DETAIL (CONCRETE)
N.T.S



9 JAMB DETAIL (METAL)
N.T.S



10 JAMB DETAIL (WOOD)
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

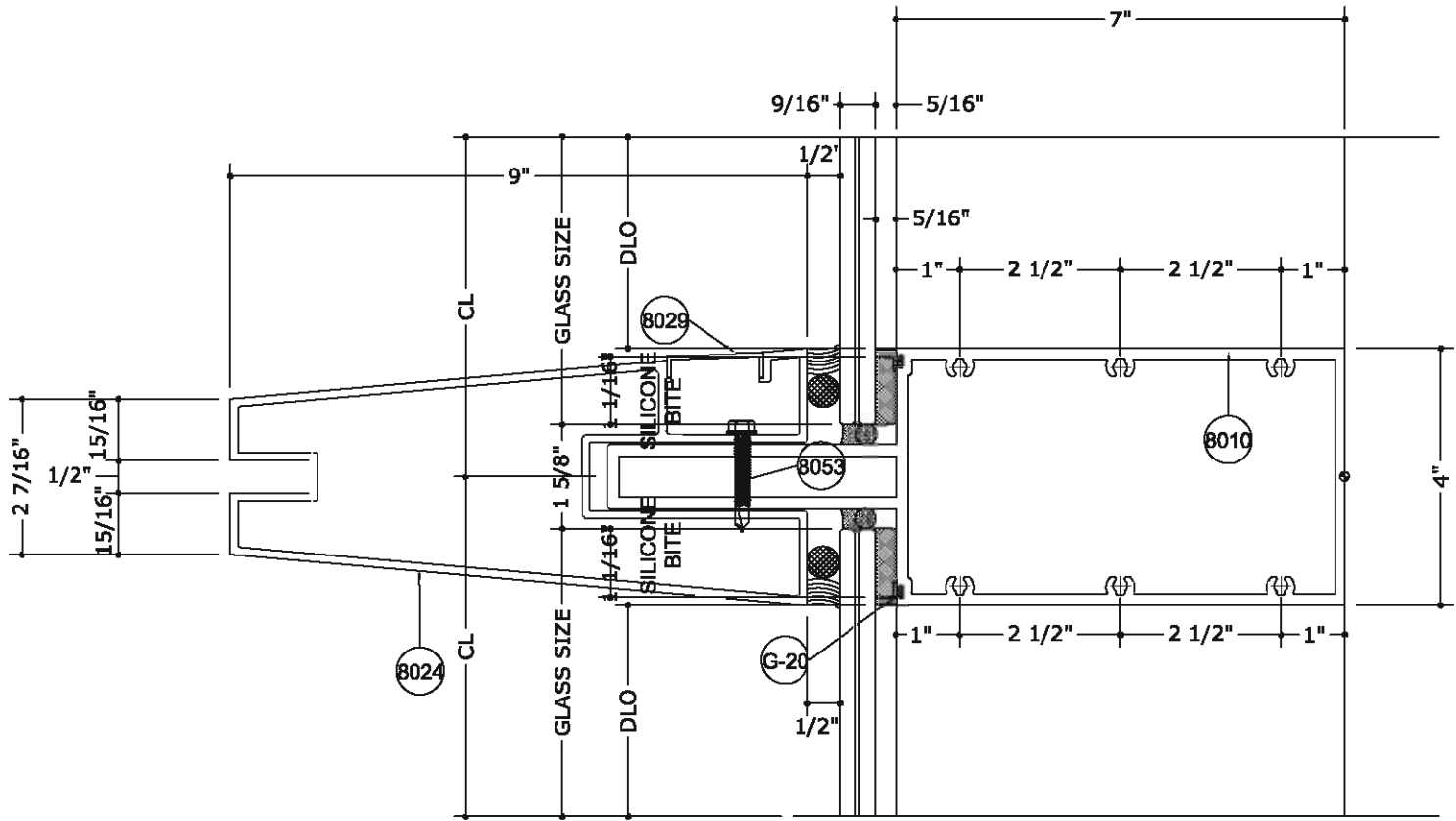
COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED



OF
64



11 INTERMEDIATE @ SUNSHADE
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS®
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
	-	-	-
	-	-	-
	-	-	-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

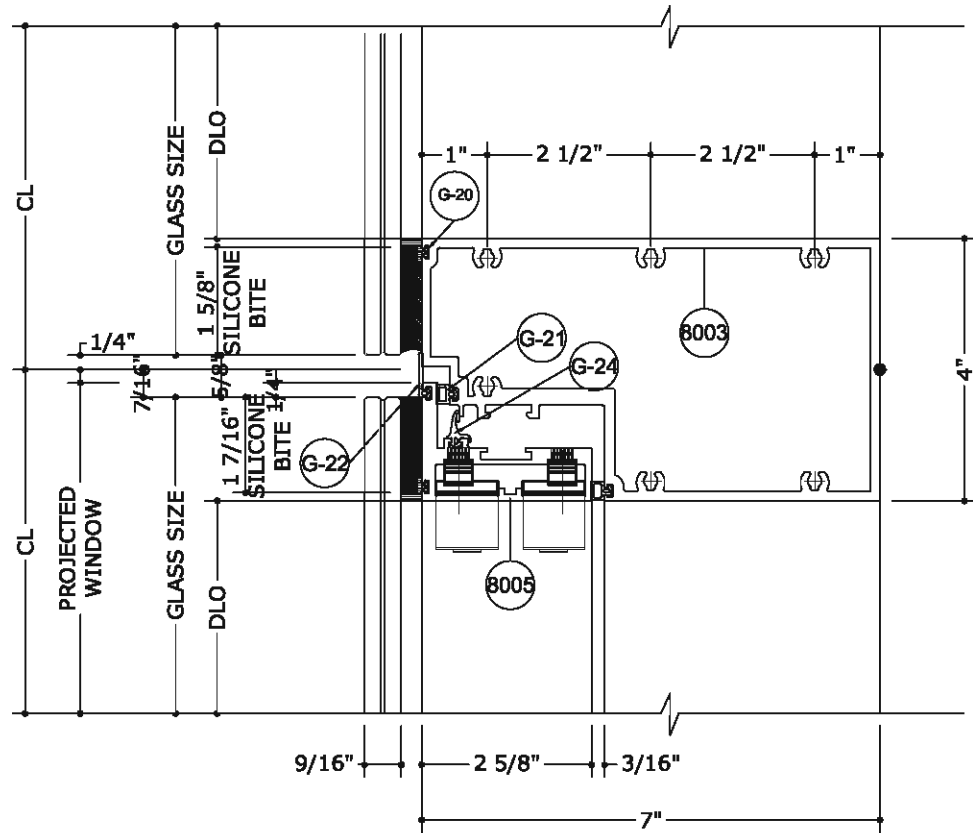
COPYRIGHT ENGINEERING EXPRESS®

20-29341

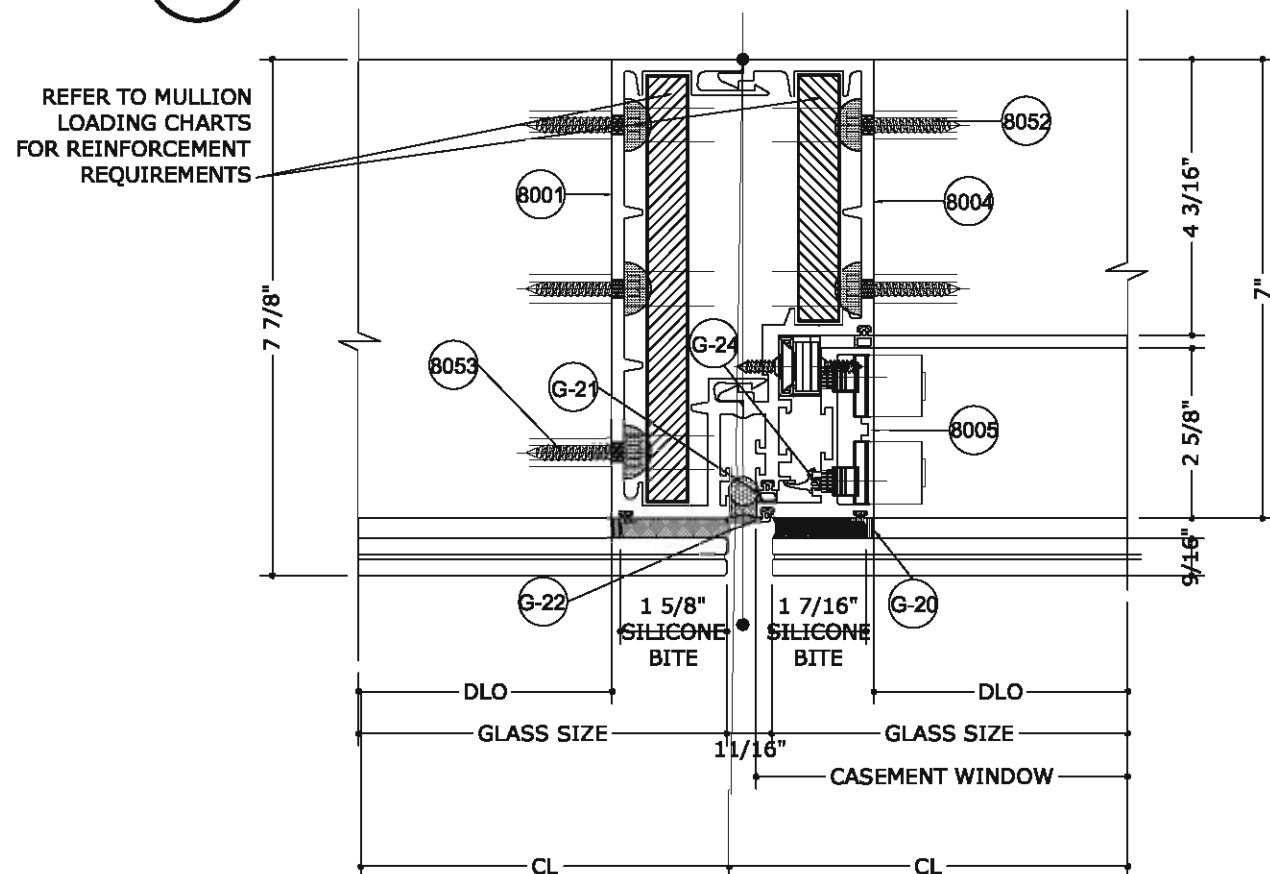
SCALE: NTS UNLESS NOTED

10

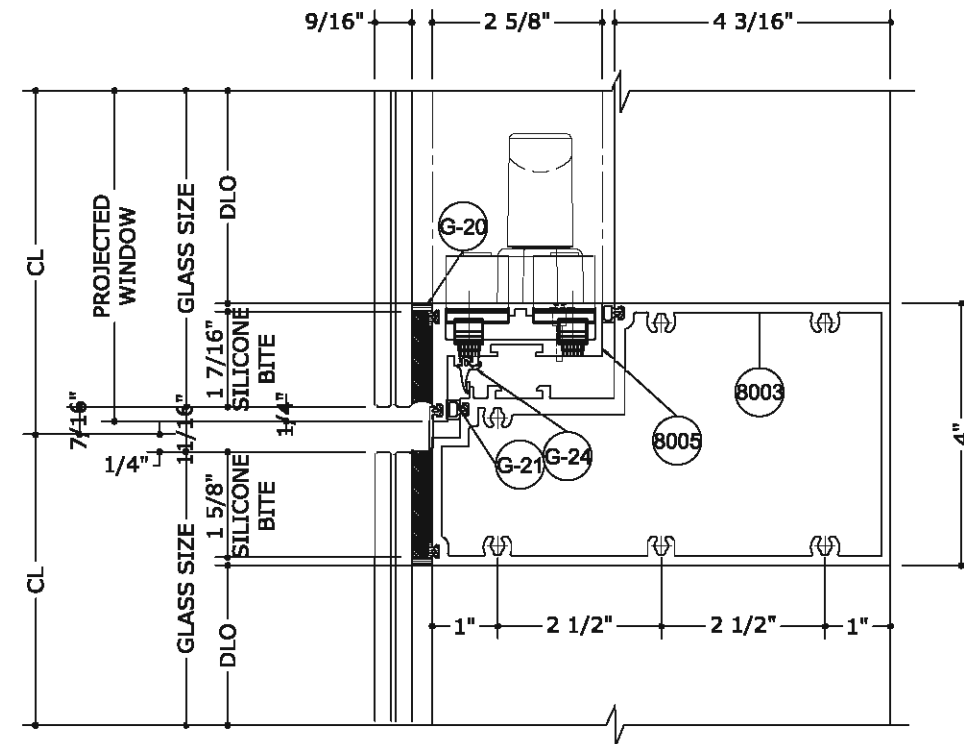
OF 64



12 INTERMEDIATE @ PROJECTED HEAD
N.T.S

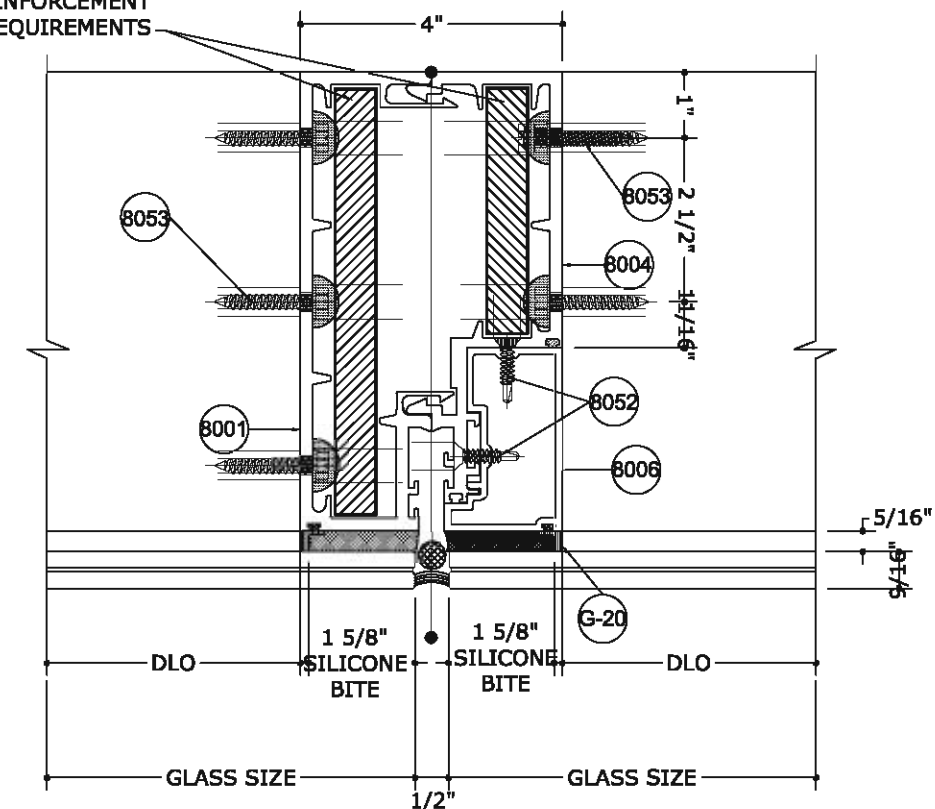


14 INTERMEDIATE @PROJECTED JAMBS
N.T.S



13 INTERMEDIATE @PROJECTED SILL
N.T.S

REFER TO MULLION LOADING CHARTS FOR REINFORCEMENT REQUIREMENTS



15 INTERMEDIATE VERTICAL WITH FILLER ADAPTOR
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287
8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

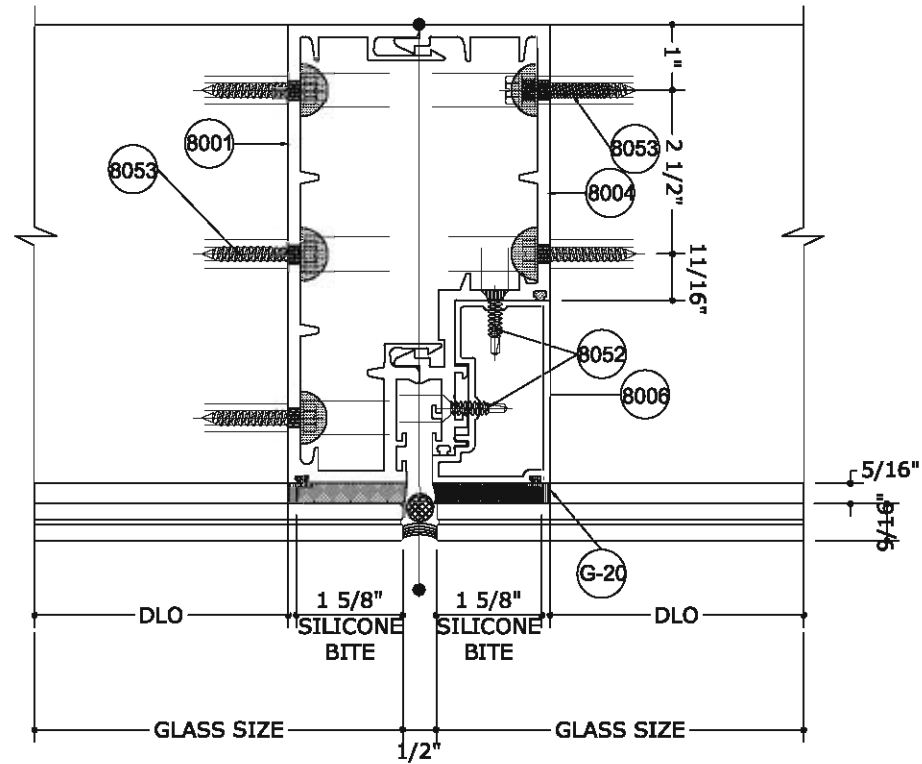
REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

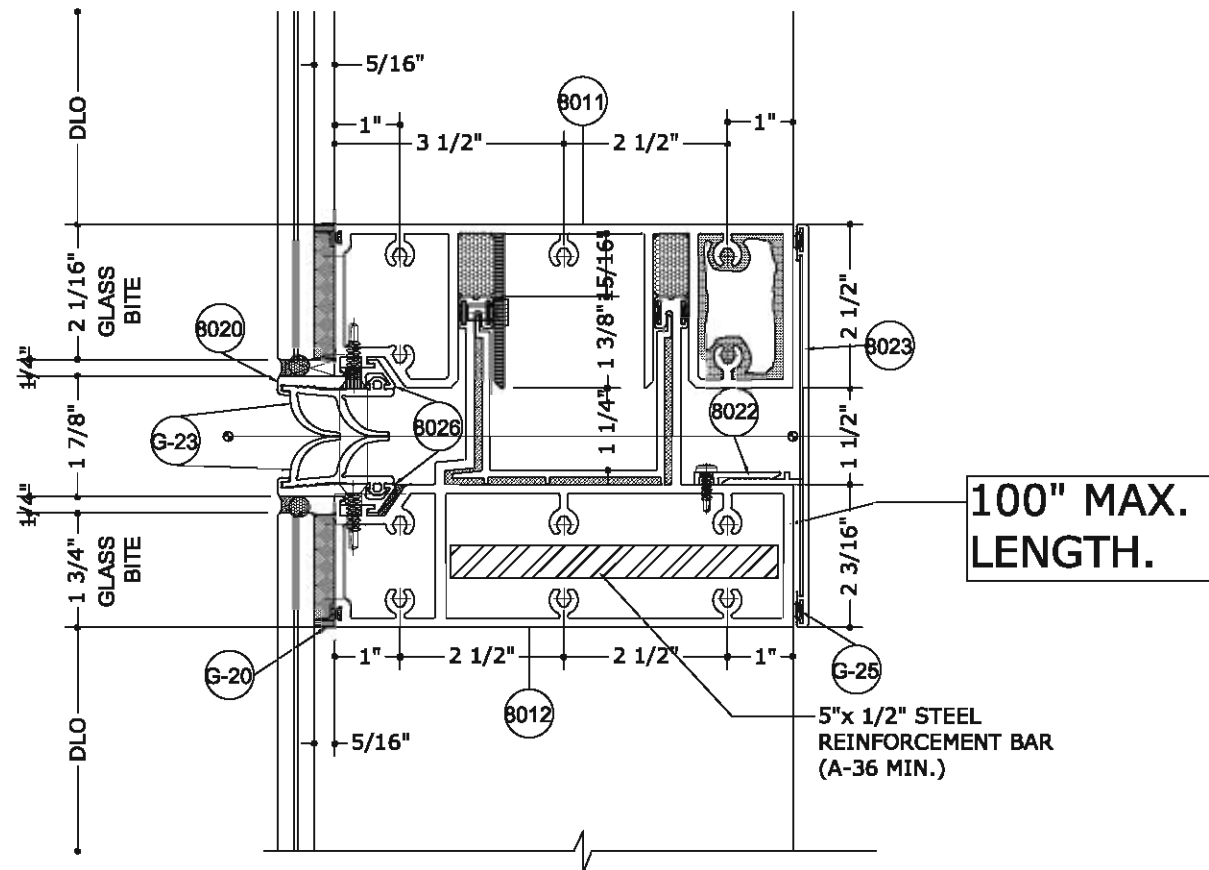
COPYRIGHT ENGINEERING EXPRESS®

20-29341
SCALE: NTS UNLESS NOTED

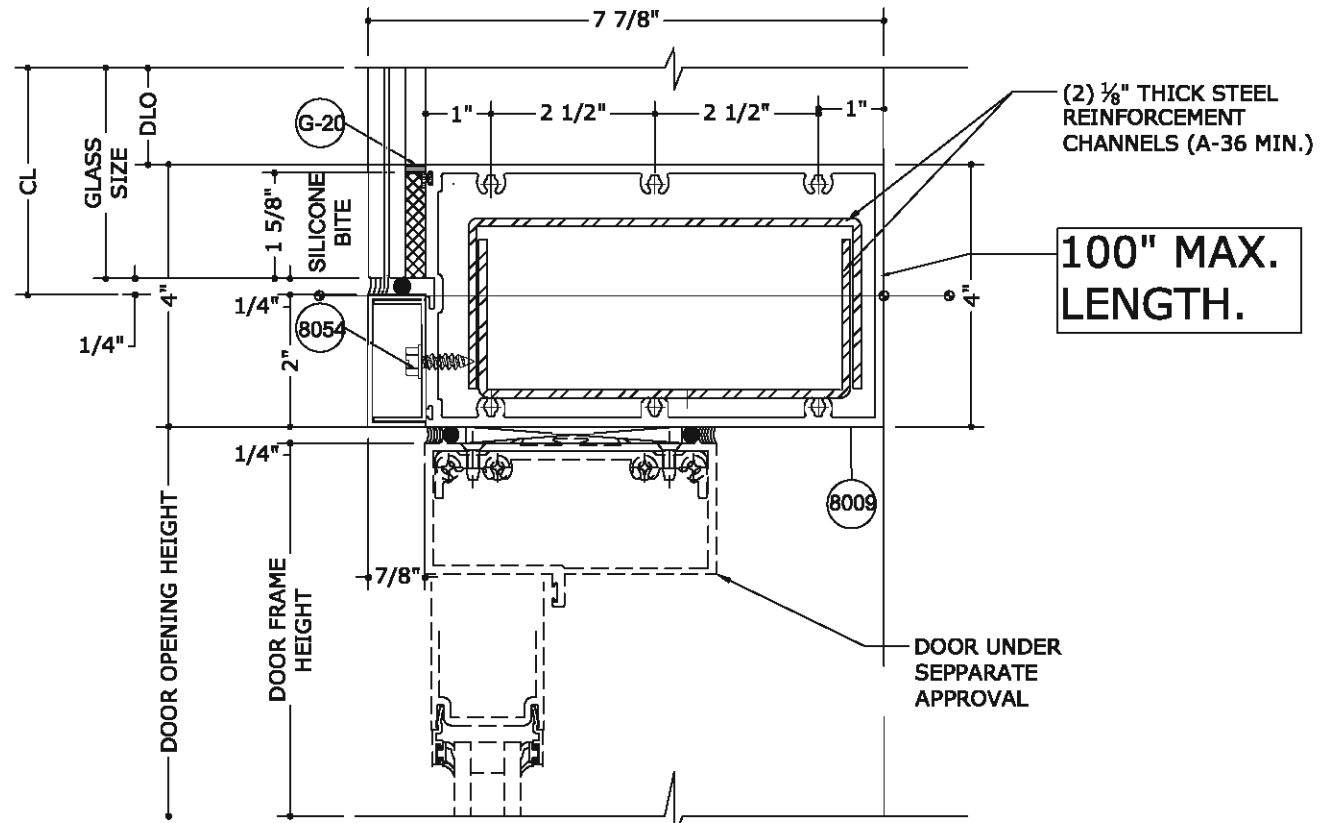
C:\Users\Francisco\Engineering\Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg
Francisco
10/14/2020 - 12:00pm



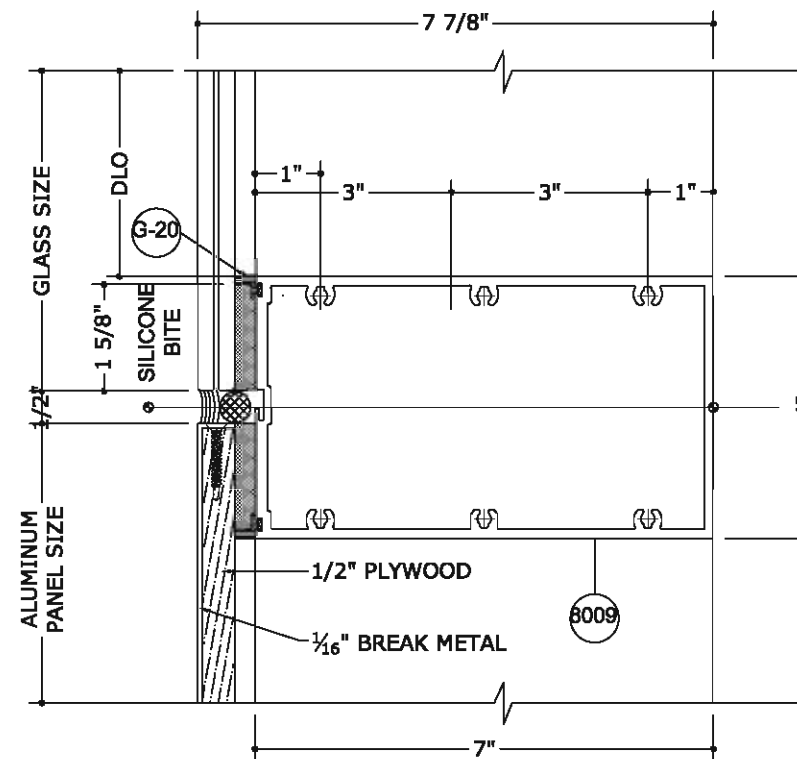
16 INTERMEDIATE VERTICAL WITH FILLER ADAPTOR
N.T.S



18 SPLICE JOINT
N.T.S



17 INTERMEDIATE @ DOOR TRANSOM
N.T.S



19 INTERMEDIATE
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

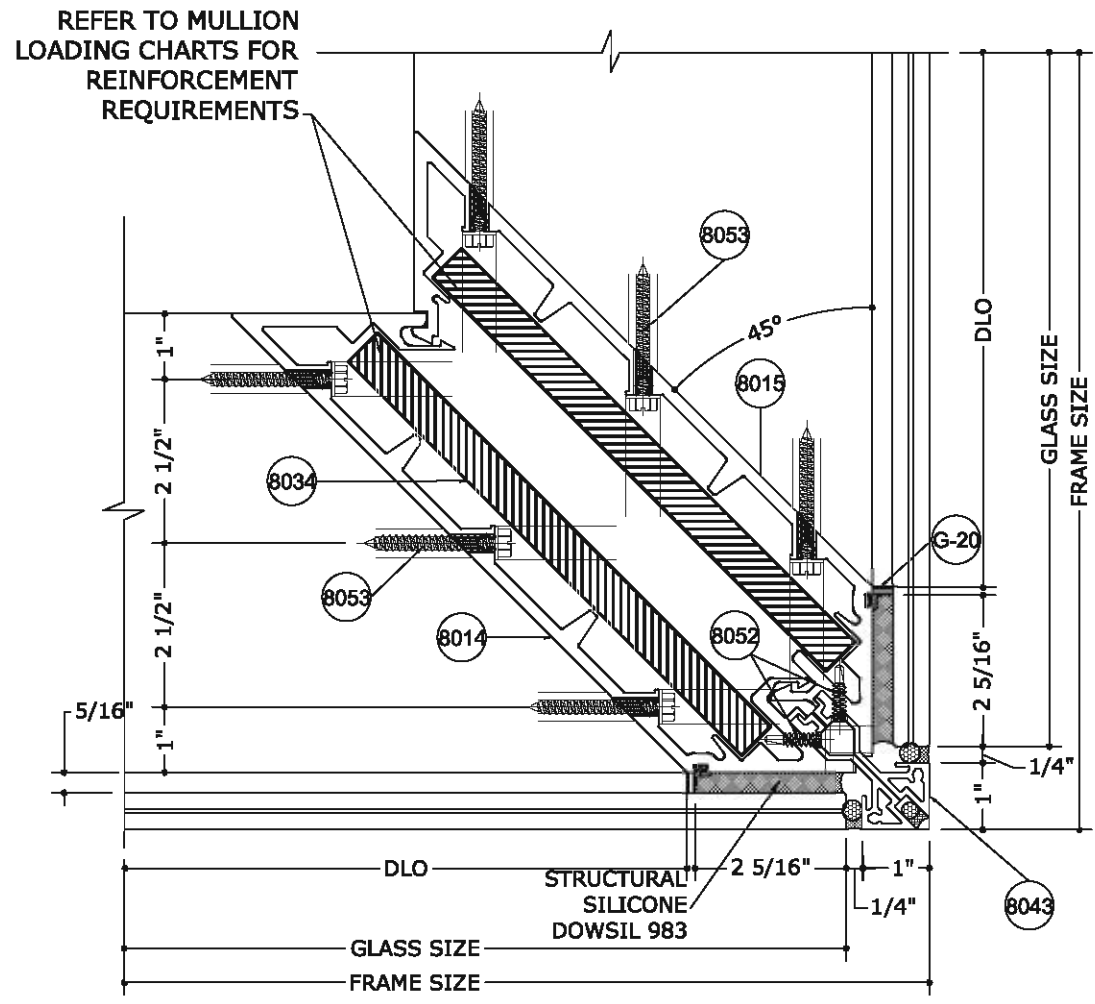
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

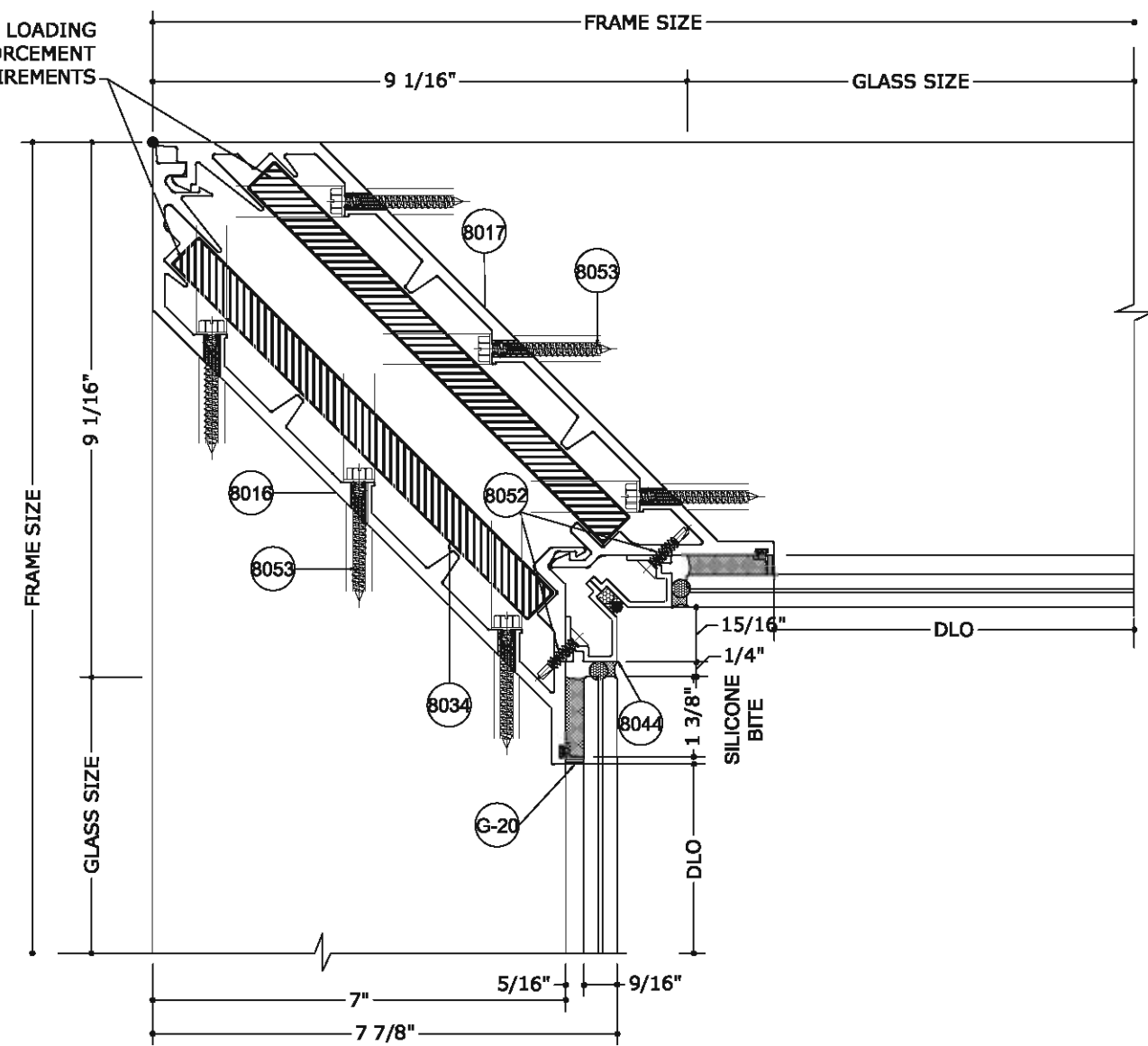
SCALE: NTS UNLESS NOTED

C:\Users\Francisco\Engineering\ExpressProduction - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:01pm Francisco



20 **OUTSIDE CORNER (REINFORCED)**
N.T.S

REFER TO MULLION LOADING CHARTS FOR REINFORCEMENT REQUIREMENTS



21 **INSIDE CORNER (REINFORCED)**
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885

FRANK L. BENARDO
0046549
10/15/2023
STATE OF FLORIDA
PROFESSIONAL ENGINEER

ENGINEERING EXPRESS

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

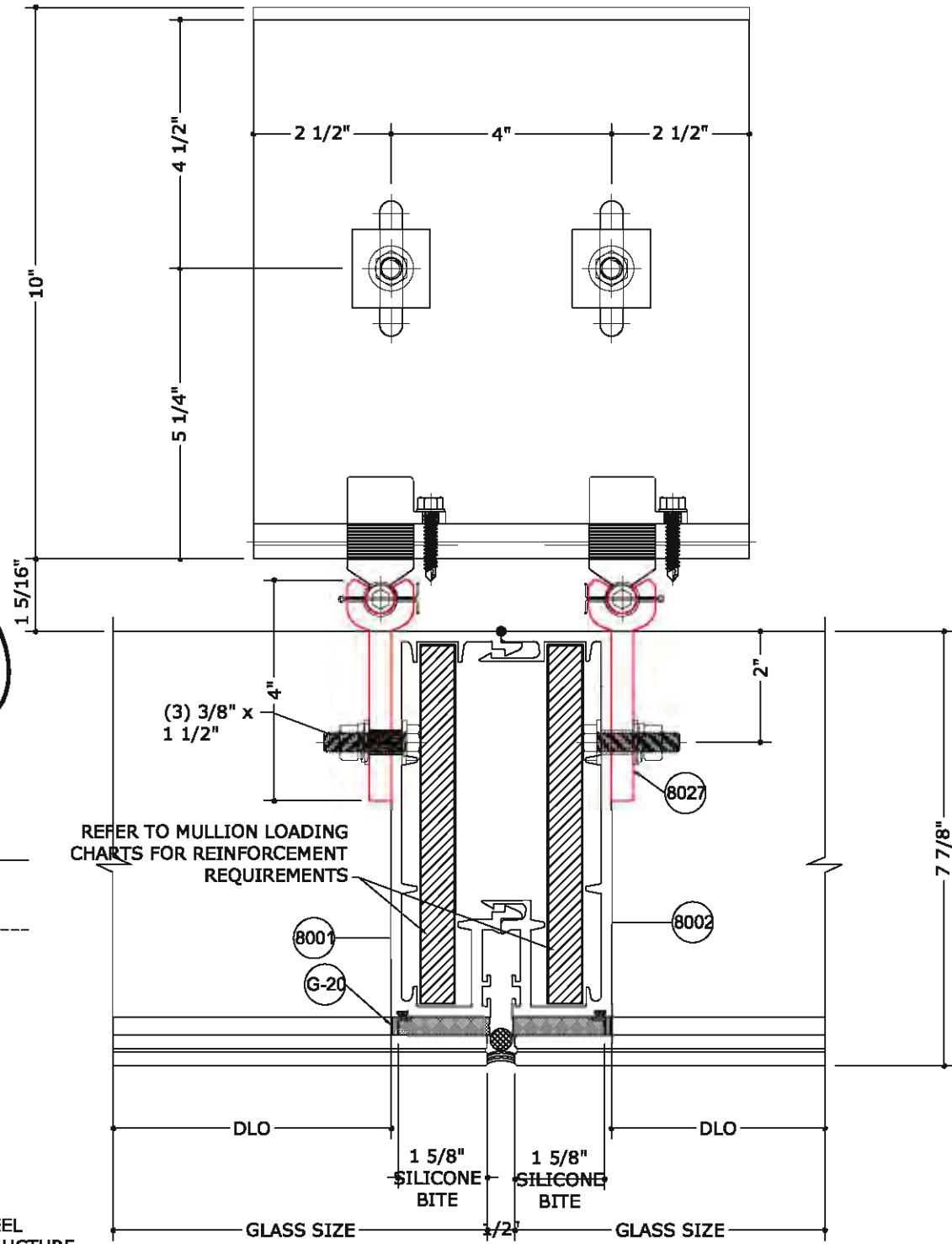
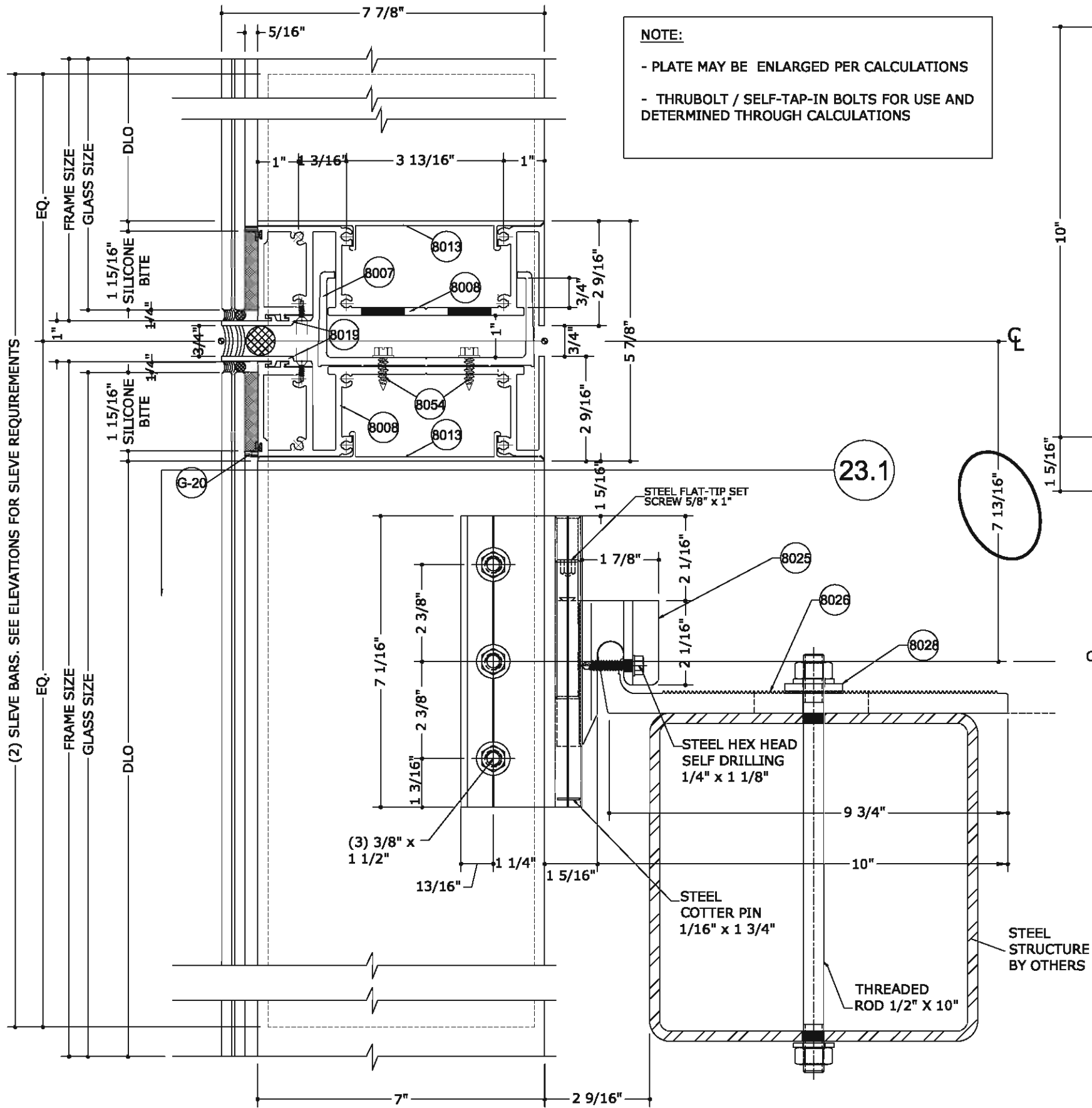
COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

13

OF 64



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

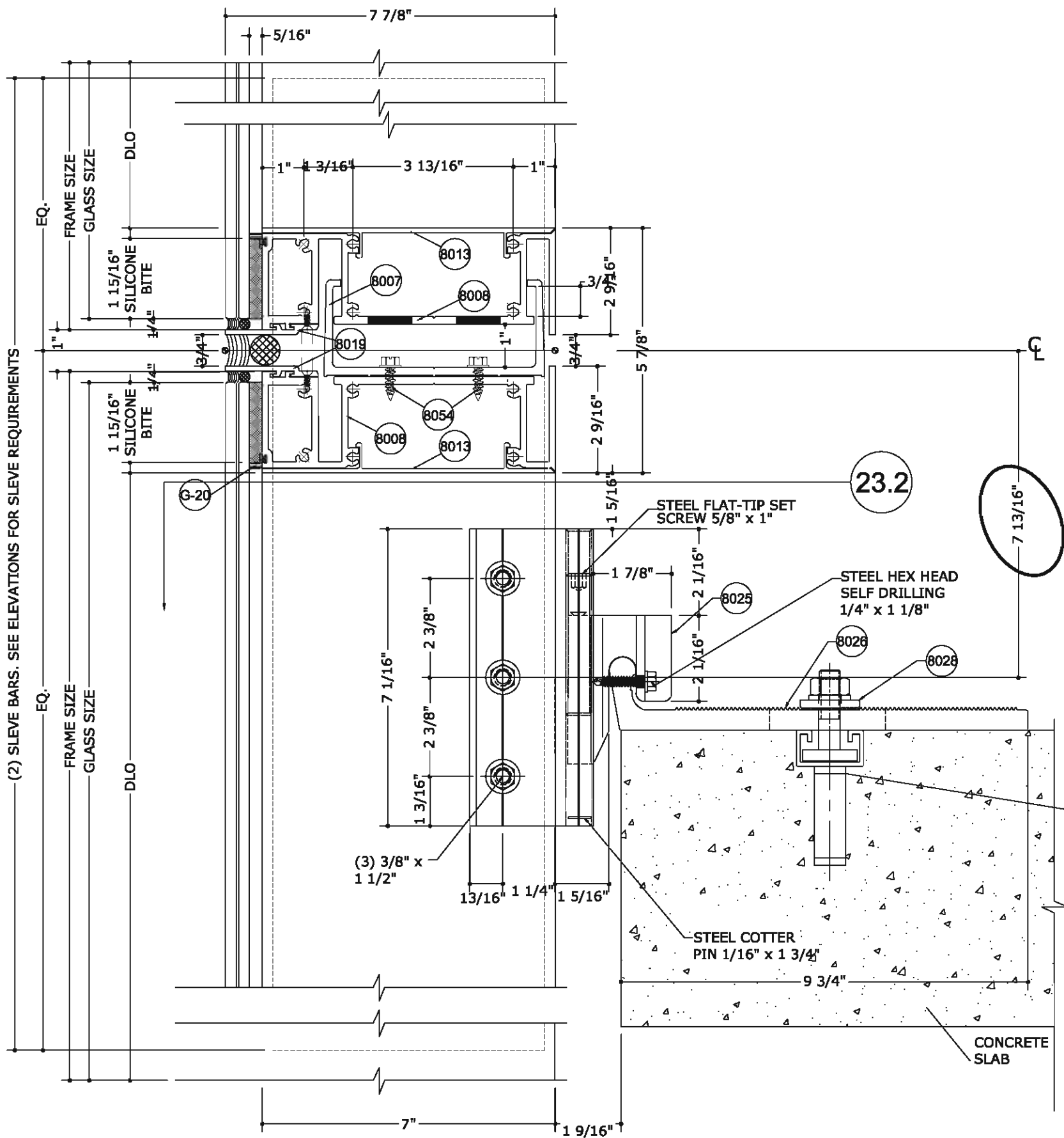
8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

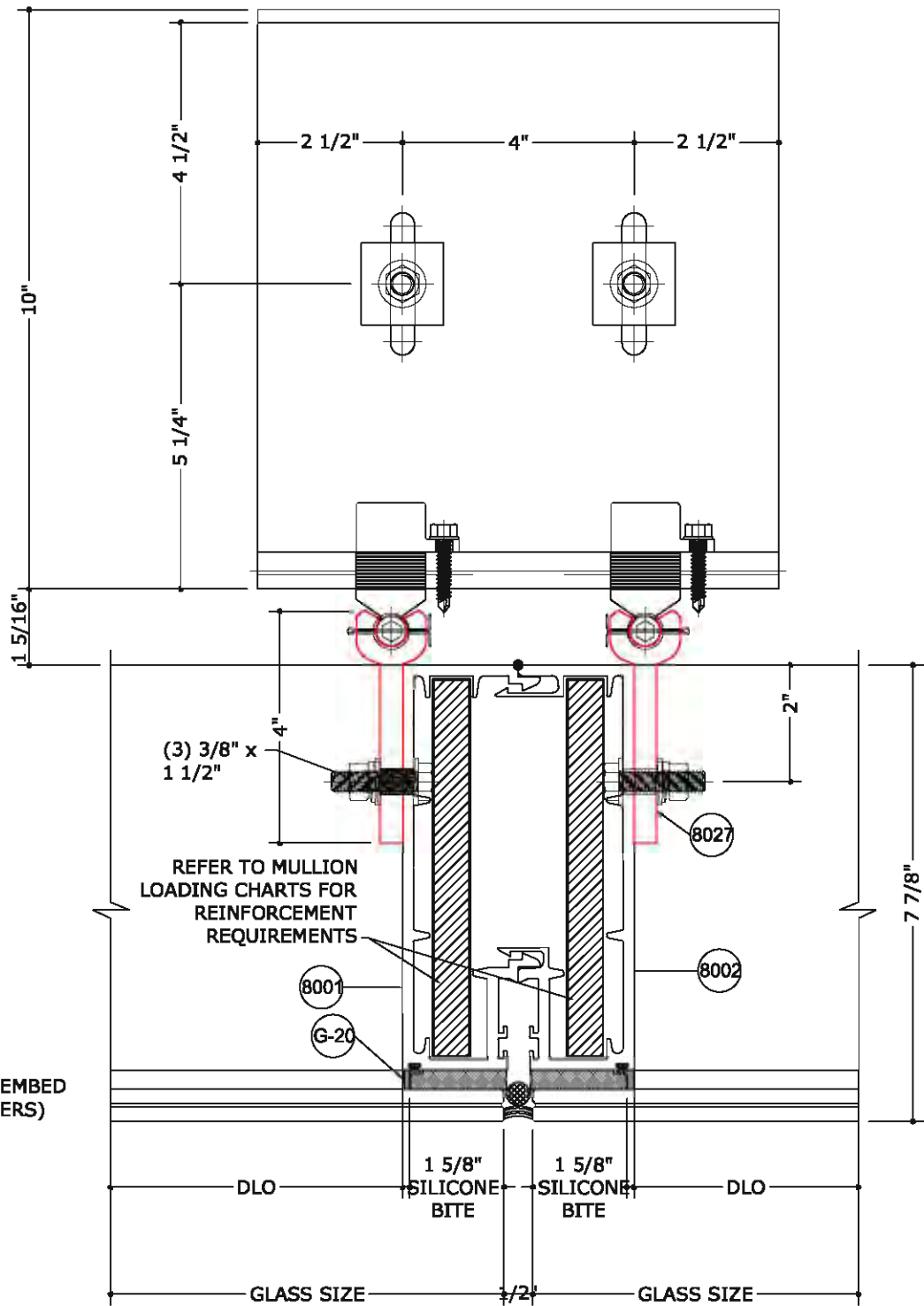
COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED



22.2 MID ANCHOR (SIDE VIEW)
N.T.S.



23.2 MID ANCHOR (TOP VIEW)
N.T.S.



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

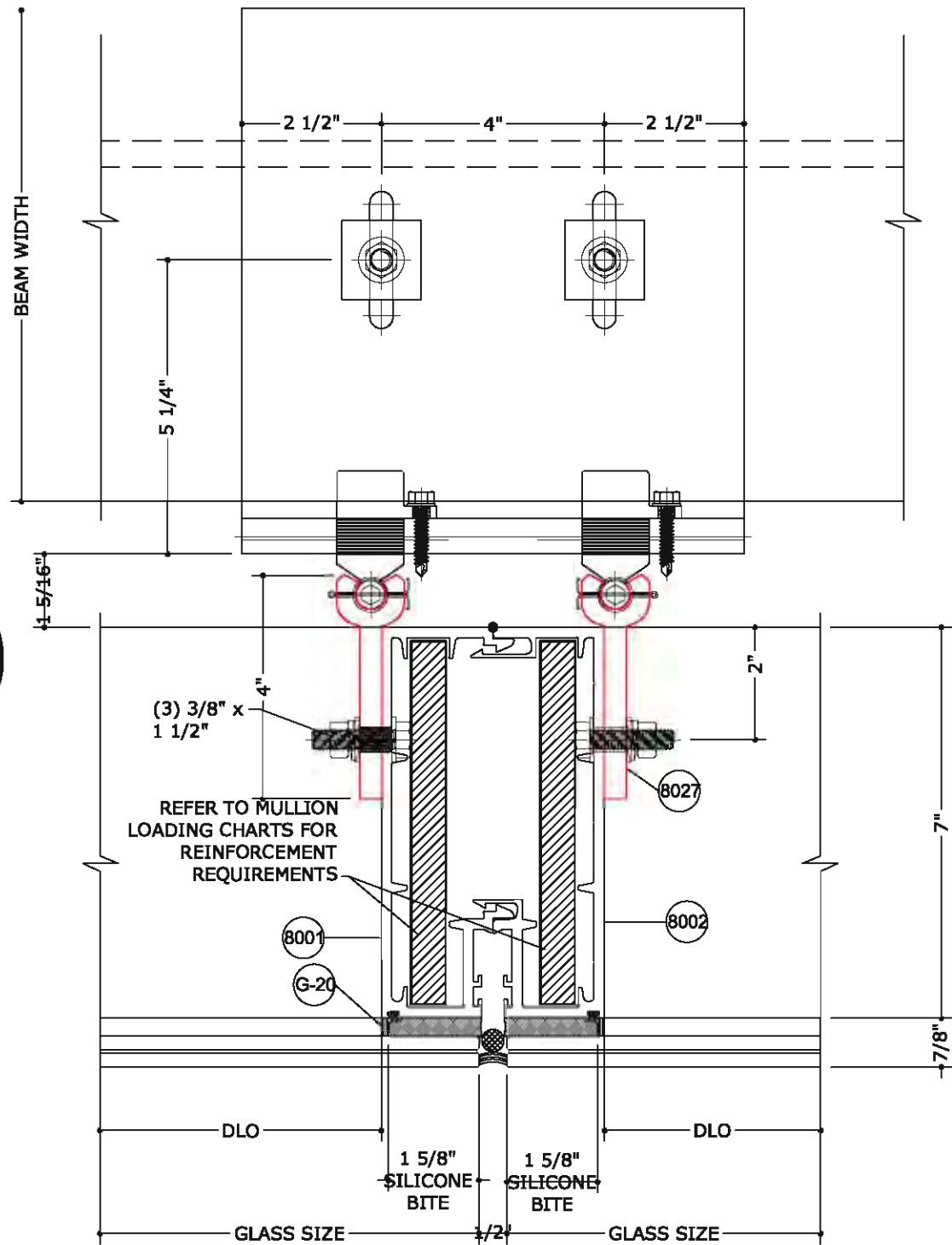
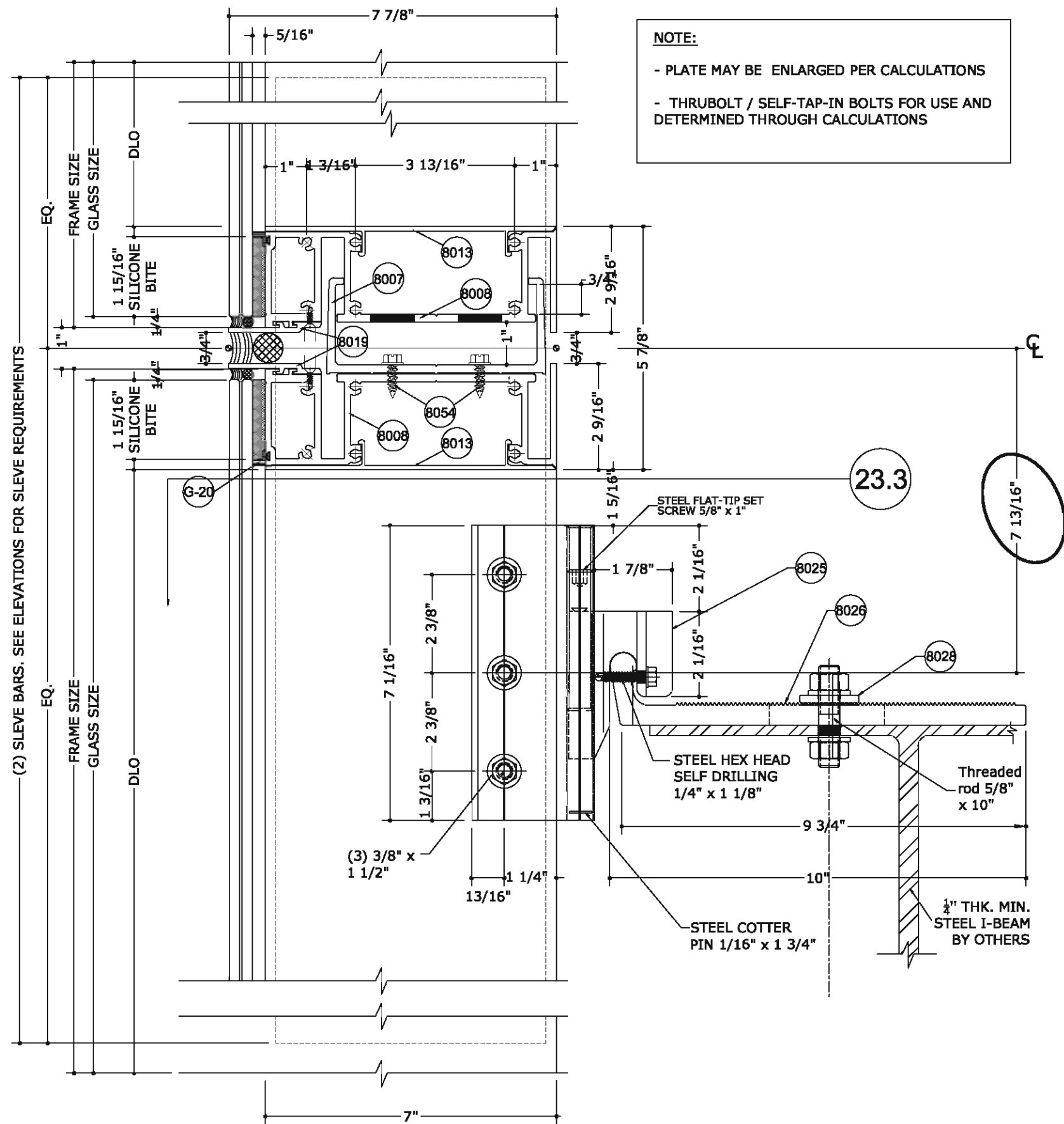
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

C:\Users\Francisco\Engineering\Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg
10/14/2020 - 12:01pm Francisco



FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.

CORAL SPRINGS, FL 33065

(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

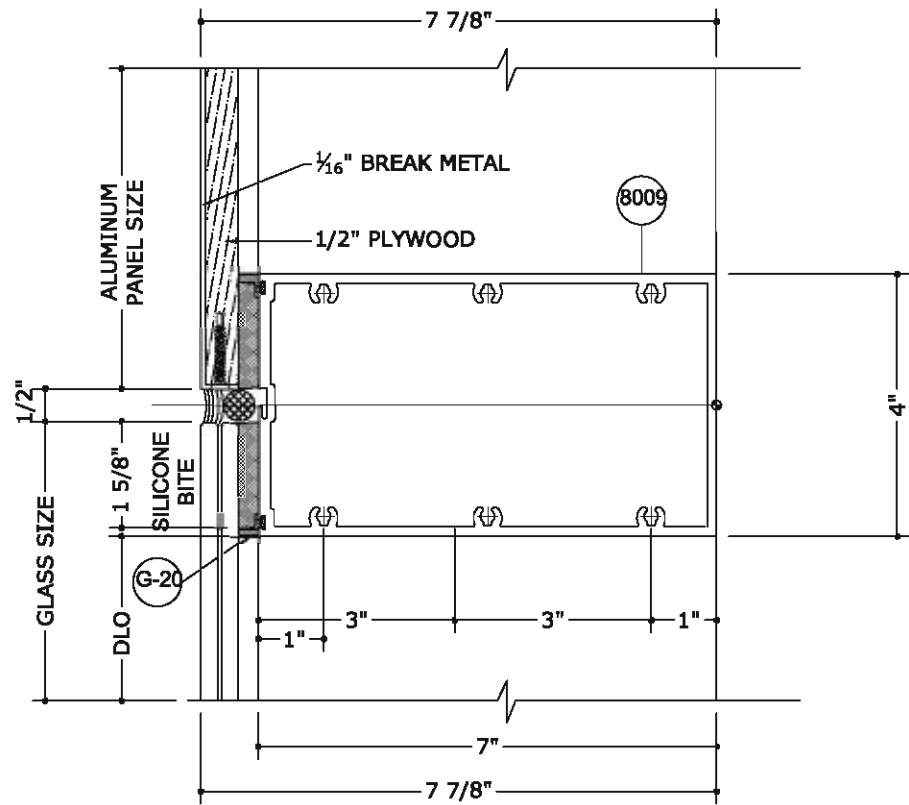
20-29341

SCALE: NTS UNLESS NOTED

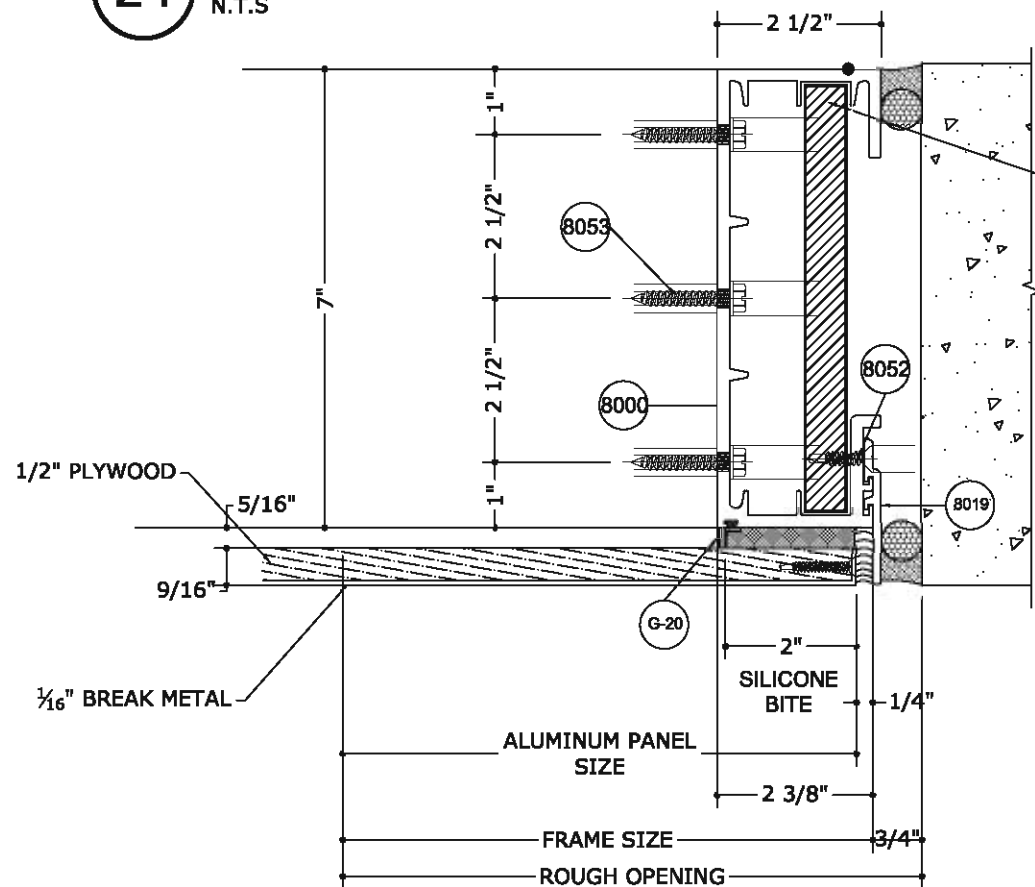
16

OF 64

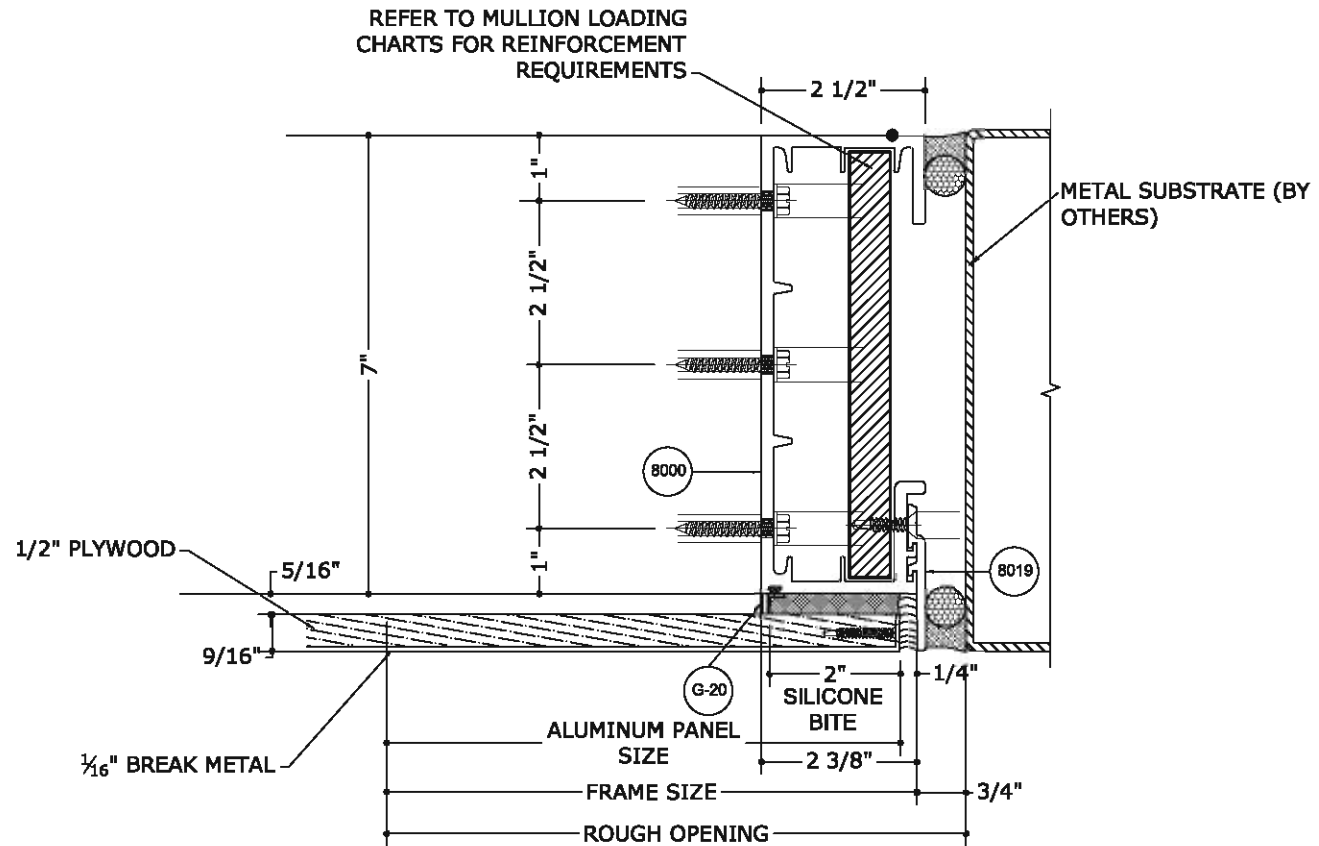
C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:01pm Francisco



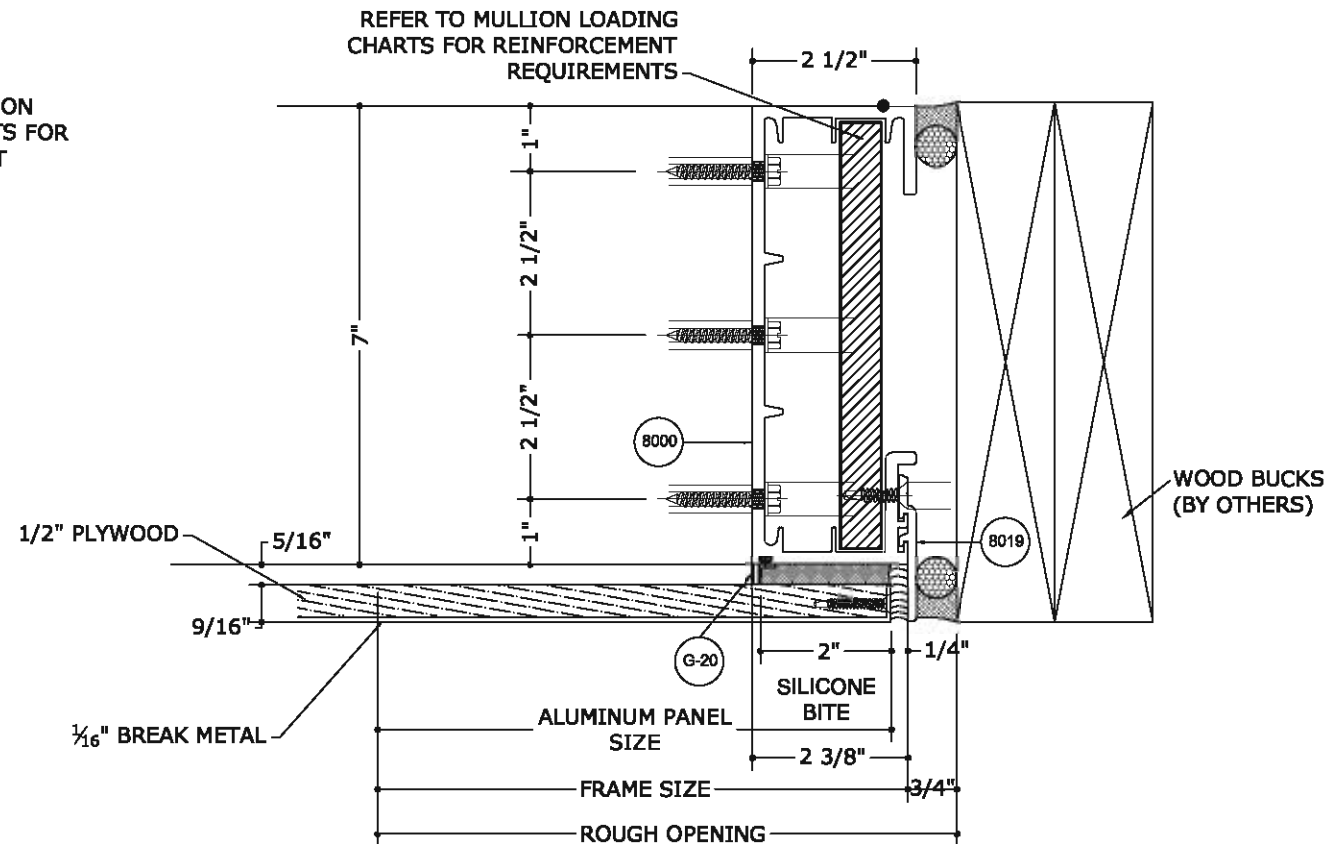
24 INTERMEDIATE
N.T.S.



25.2 JAMB DETAIL (CONCRETE)
N.T.S.



25.1 JAMB DETAIL (METAL)
N.T.S.



25.3 JAMB DETAIL (WOOD)
N.T.S.

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

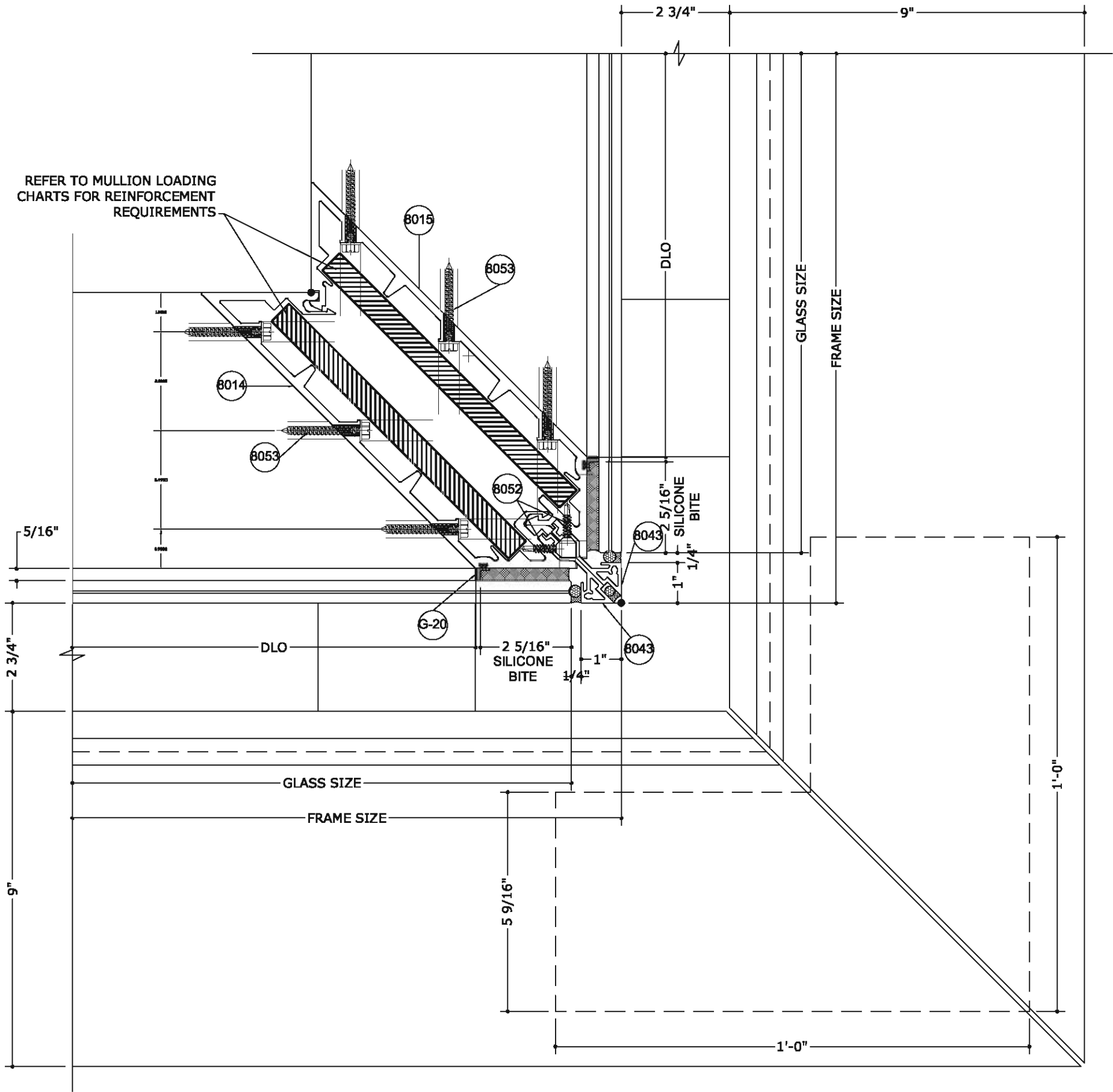
SCALE: NTS UNLESS NOTED

17 OF 64

C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg

Francisco

10/14/2020 - 12:01pm



26 OUTSIDE CORNER @SUNSHADE
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
	-	-	-
	-	-	-
	-	-	-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

18

OF 64

UNITED GLASS SYSTEMS
2222 N.W. 43RD AVE.

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

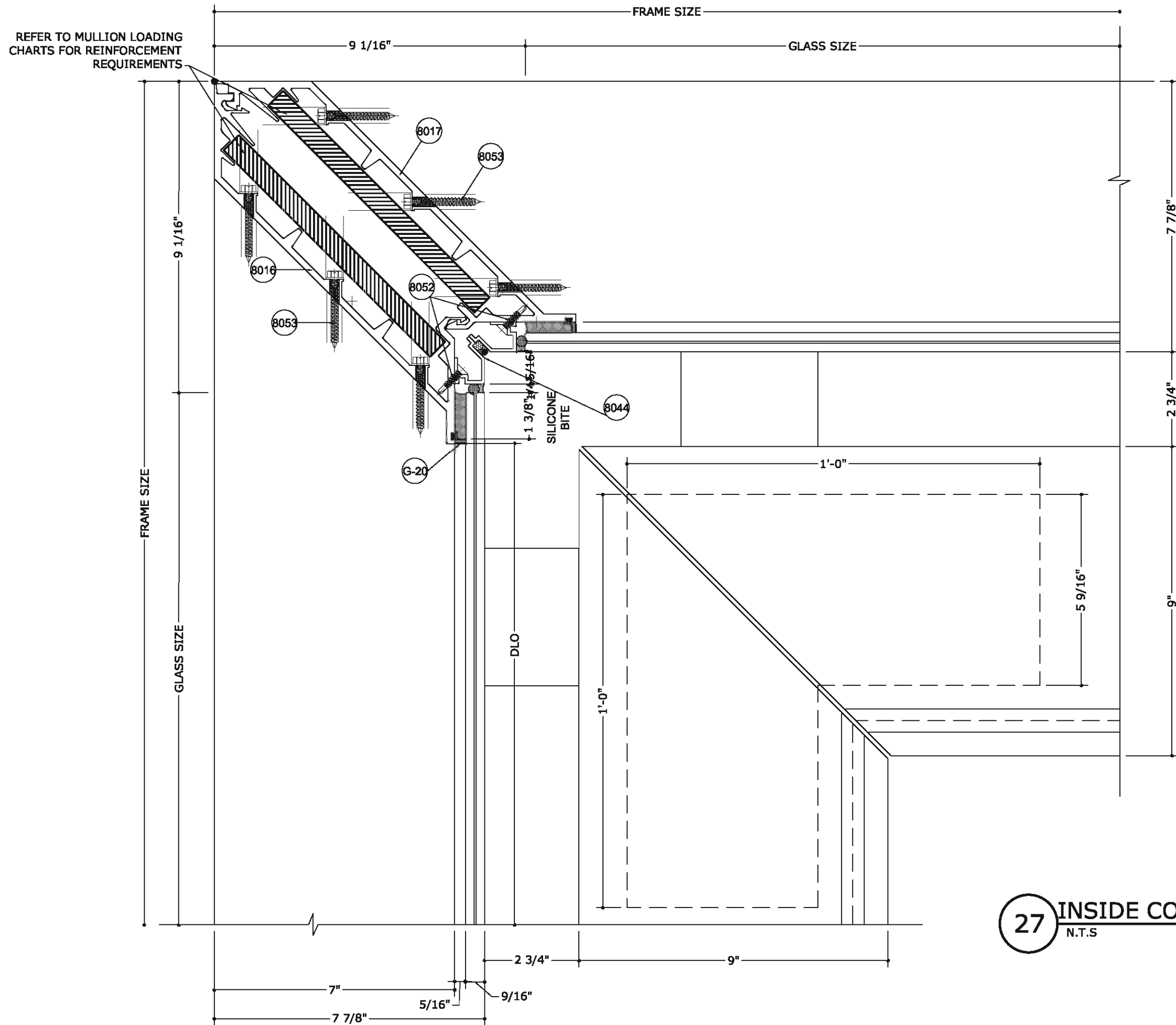
REMARKS	DRWN	CHKD	DATE
INITIAL ISSUE	JEM	AJP	06/21/19
2020: FBC	CCB	AJP	10/13/20
-	-	-	-
-	-	-	-
-	-	-	-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS, AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

20-29341

SCALE: NTS UNLESS NOTED

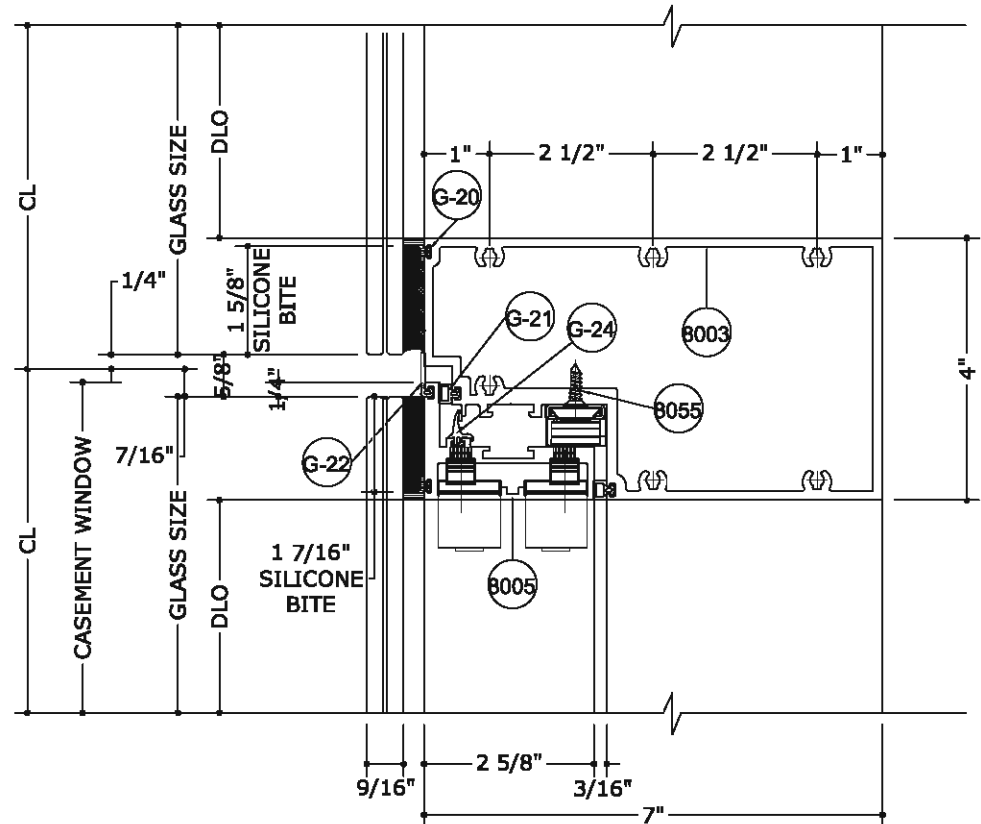
19



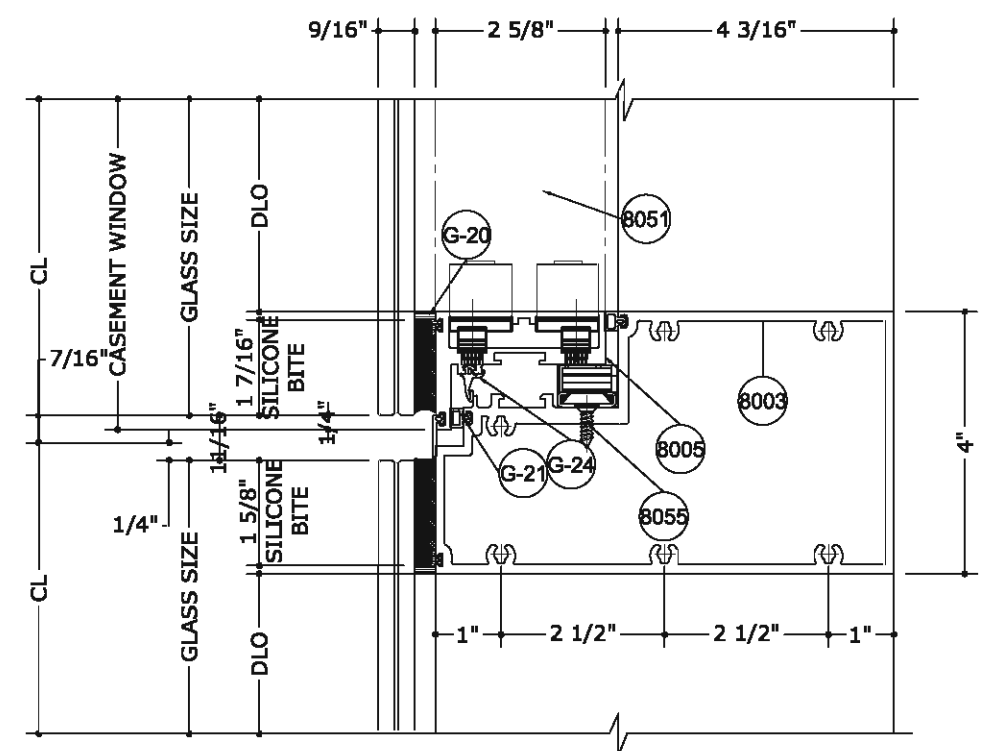
27

INSIDE CORNER @ SUNSHADE
N.T.S

C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg
Francisco
10/14/2020 - 12:01pm



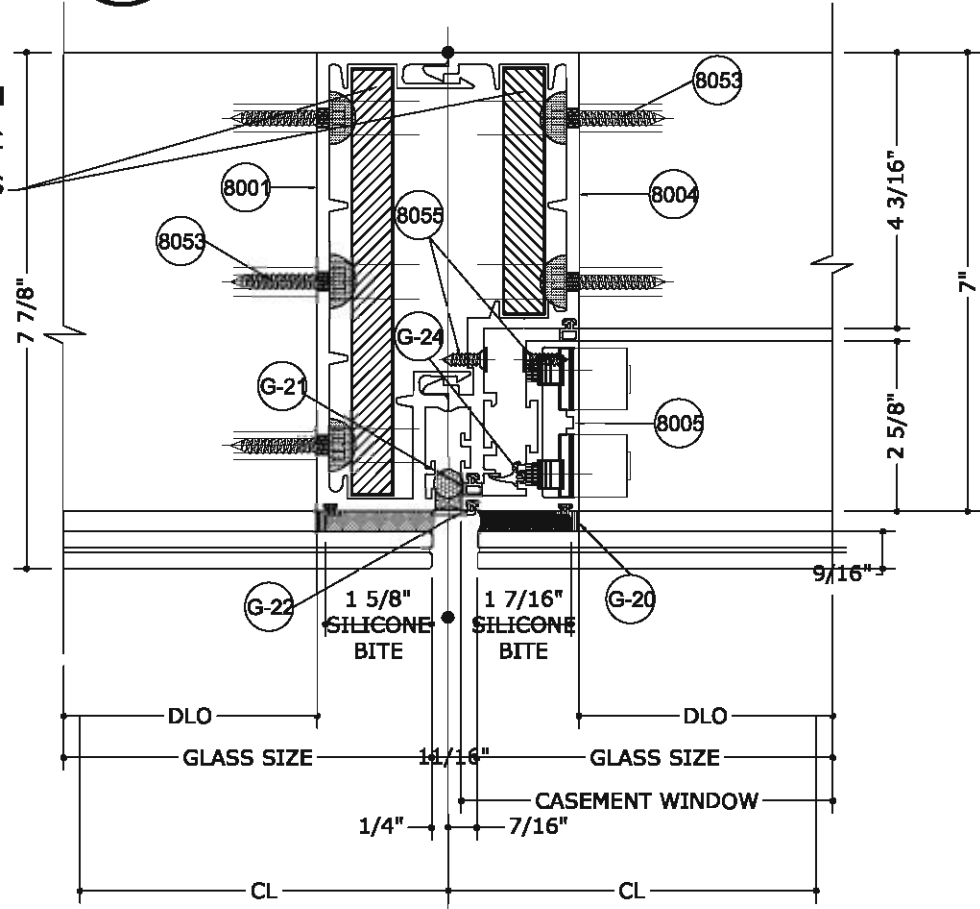
28 INTERMEDIATE @ CASEMENT HEAD
N.T.S



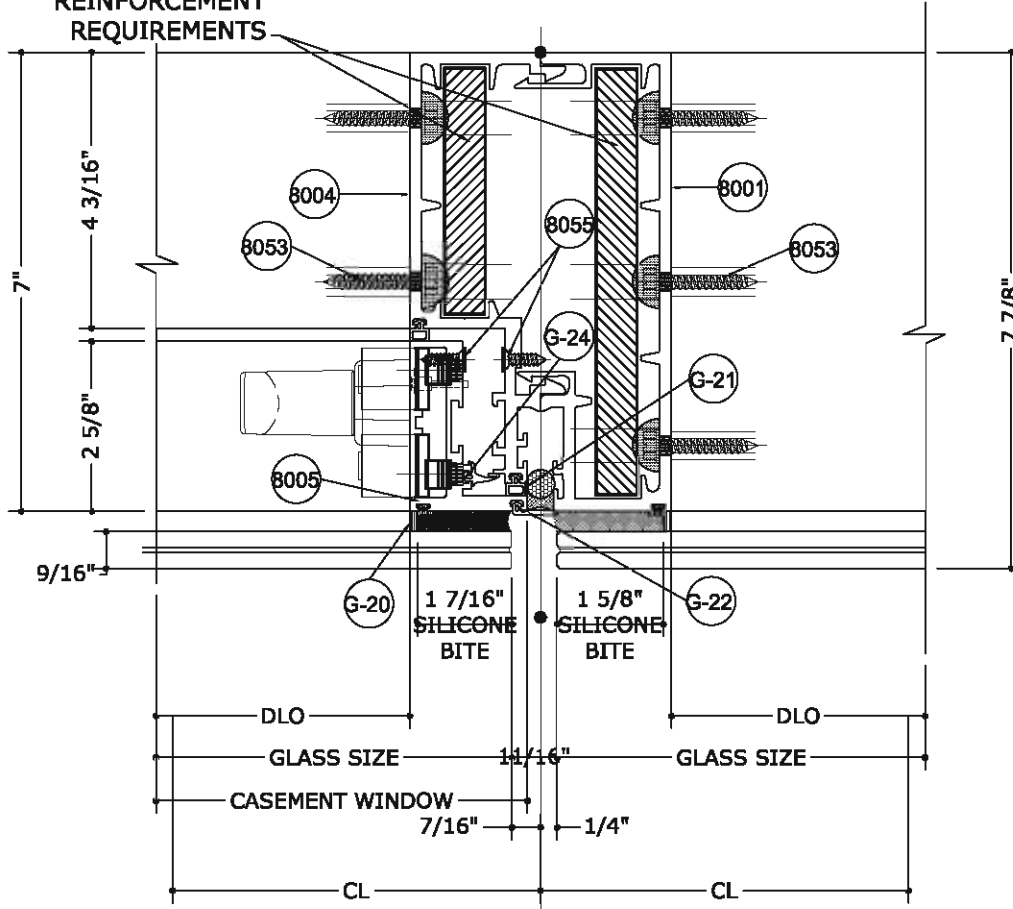
29 INTERMEDIATE @ CASEMENT HEAD
N.T.S

REFER TO MULLION
LOADING CHARTS FOR
REINFORCEMENT
REQUIREMENTS

REFER TO MULLION
LOADING CHARTS FOR
REINFORCEMENT
REQUIREMENTS



30 INTERMEDIATE @ CASEMENT HEAD
N.T.S



31 INTERMEDIATE @ CASEMENT HEAD
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

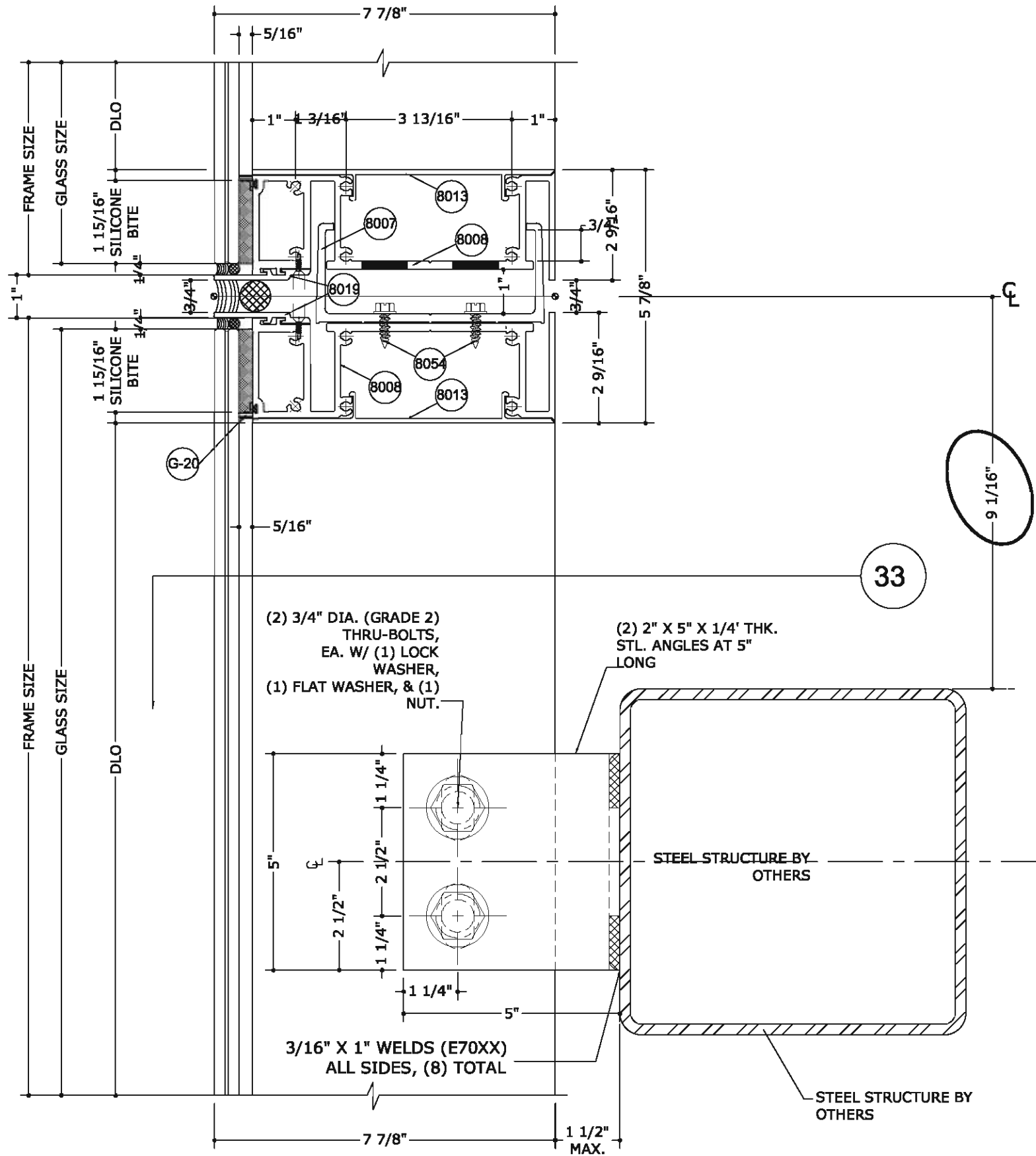
20-29341

SCALE: NTS UNLESS NOTED

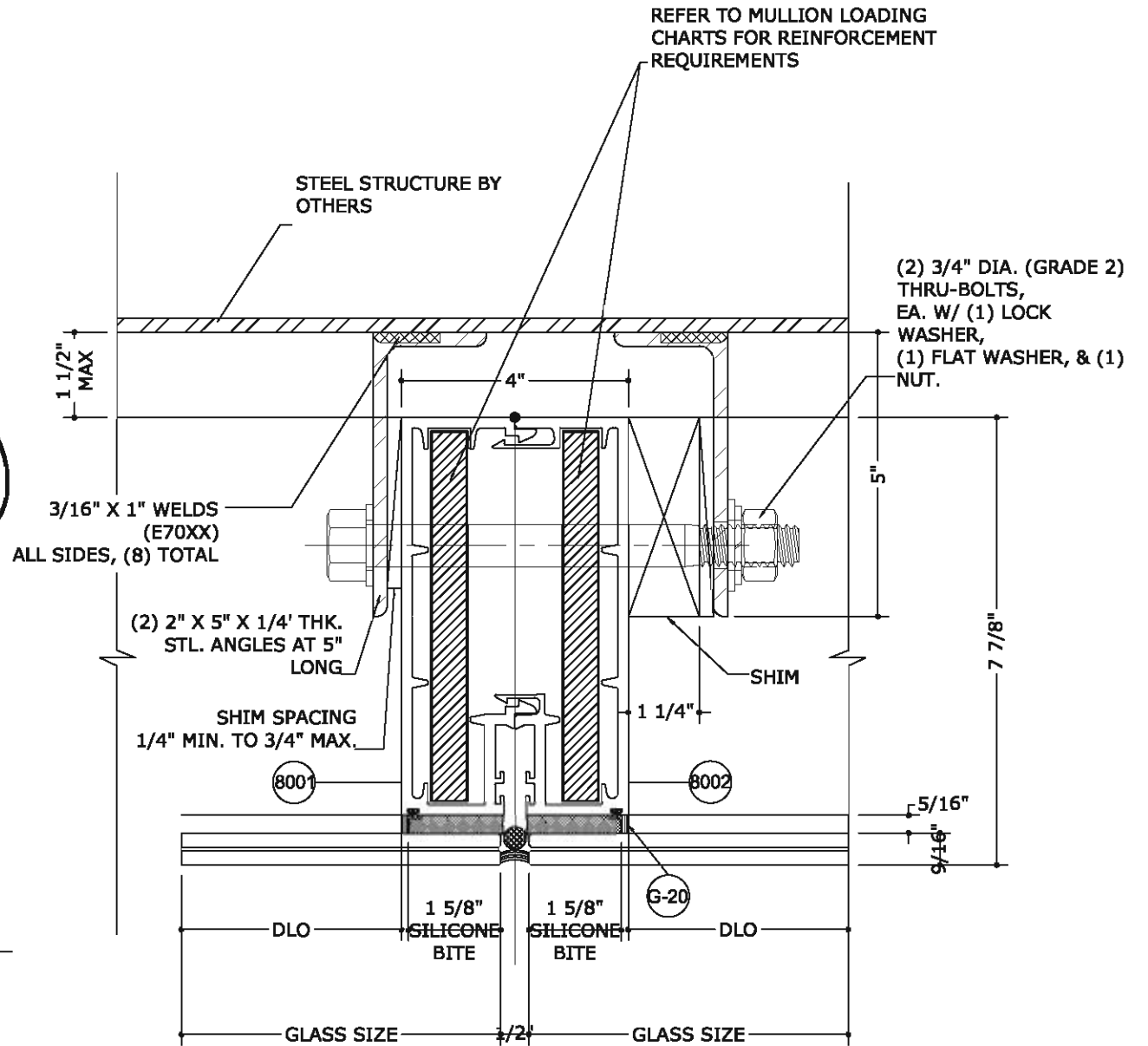
OF 64

20

C:\Users\Francisco\Engineering\ExpressProduction - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:01pm Francisco



32 MID ANCHOR (SIDE VIEW)
N.T.S.



33 MID ANCHOR (TOP VIEW)
N.T.S.

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287
8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

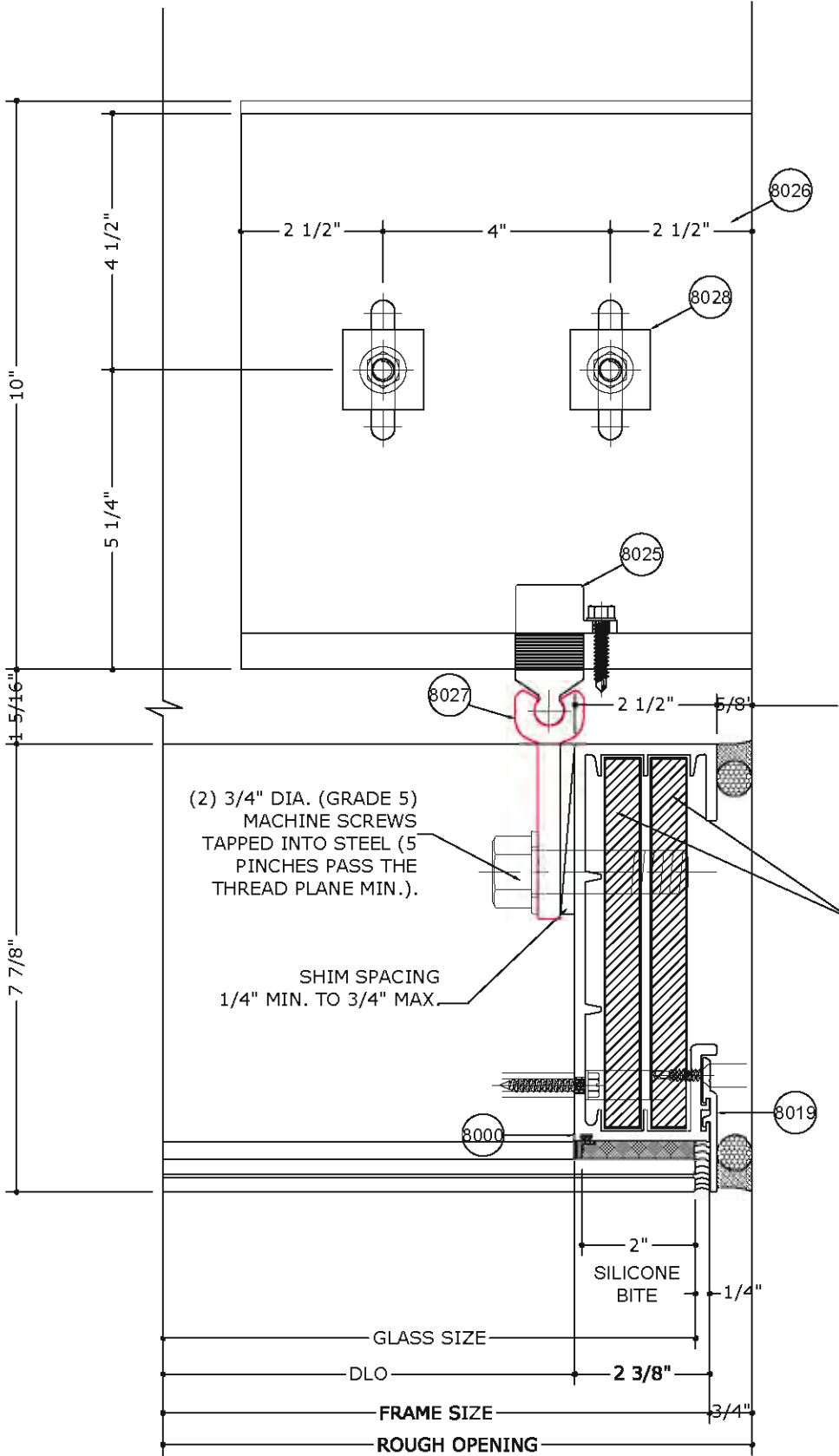
SCALE: NTS UNLESS NOTED

21 OF 64

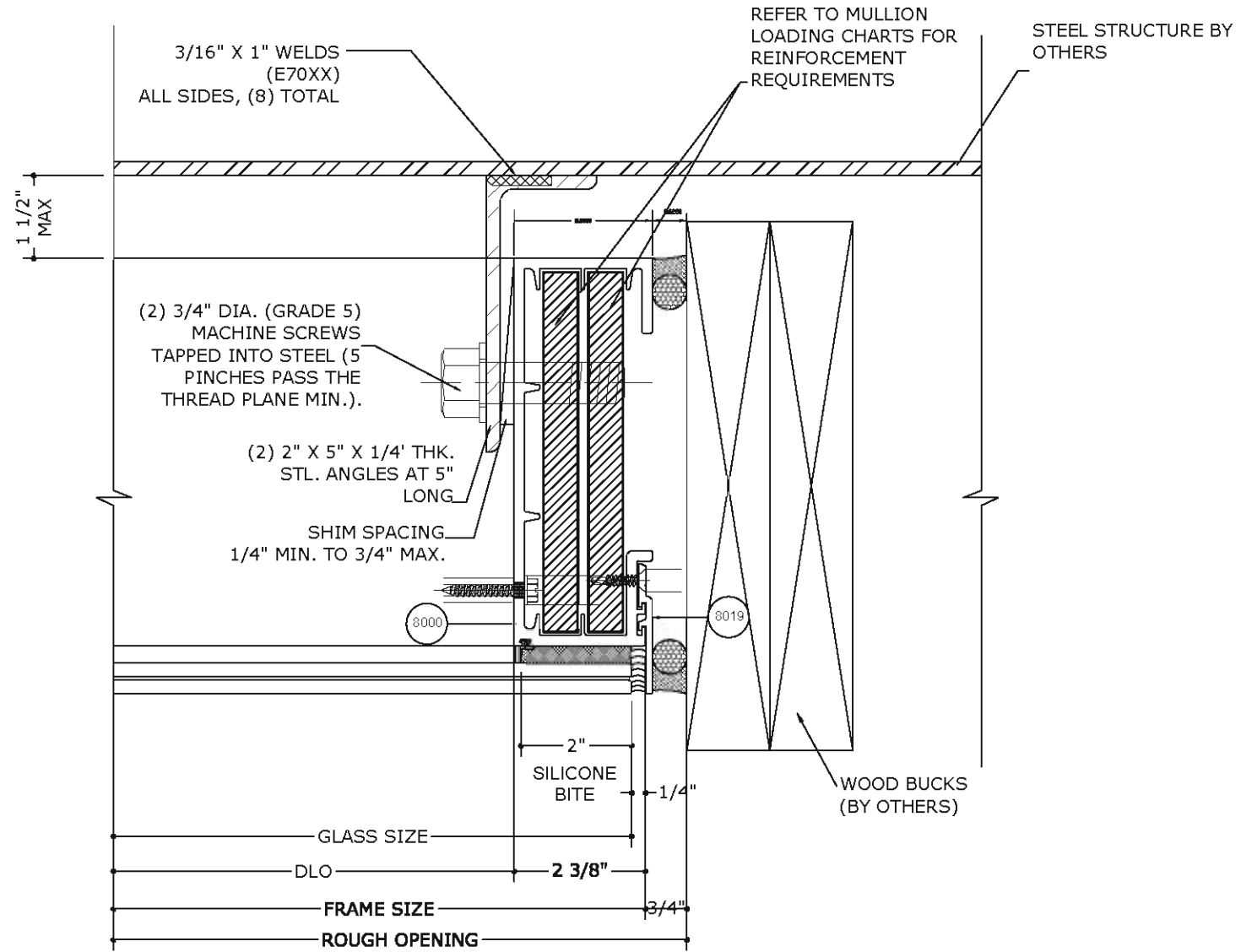
C:\Users\Francisco\Engineering\ExpressProduction - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg

Francisco

10/14/2020 - 12:01pm



34 MID ANCHOR AT JAMB
N.T.S



35 MID ANCHOR AT JAMB
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

22

OF 64

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWIN	CHKD	DATE
INITIAL ISSUE	JEM	AJP	06/21/19
20200 FEB	CCB	AJP	10/13/20
-	-	-	-
-	-	-	-
-	-	-	-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS, AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

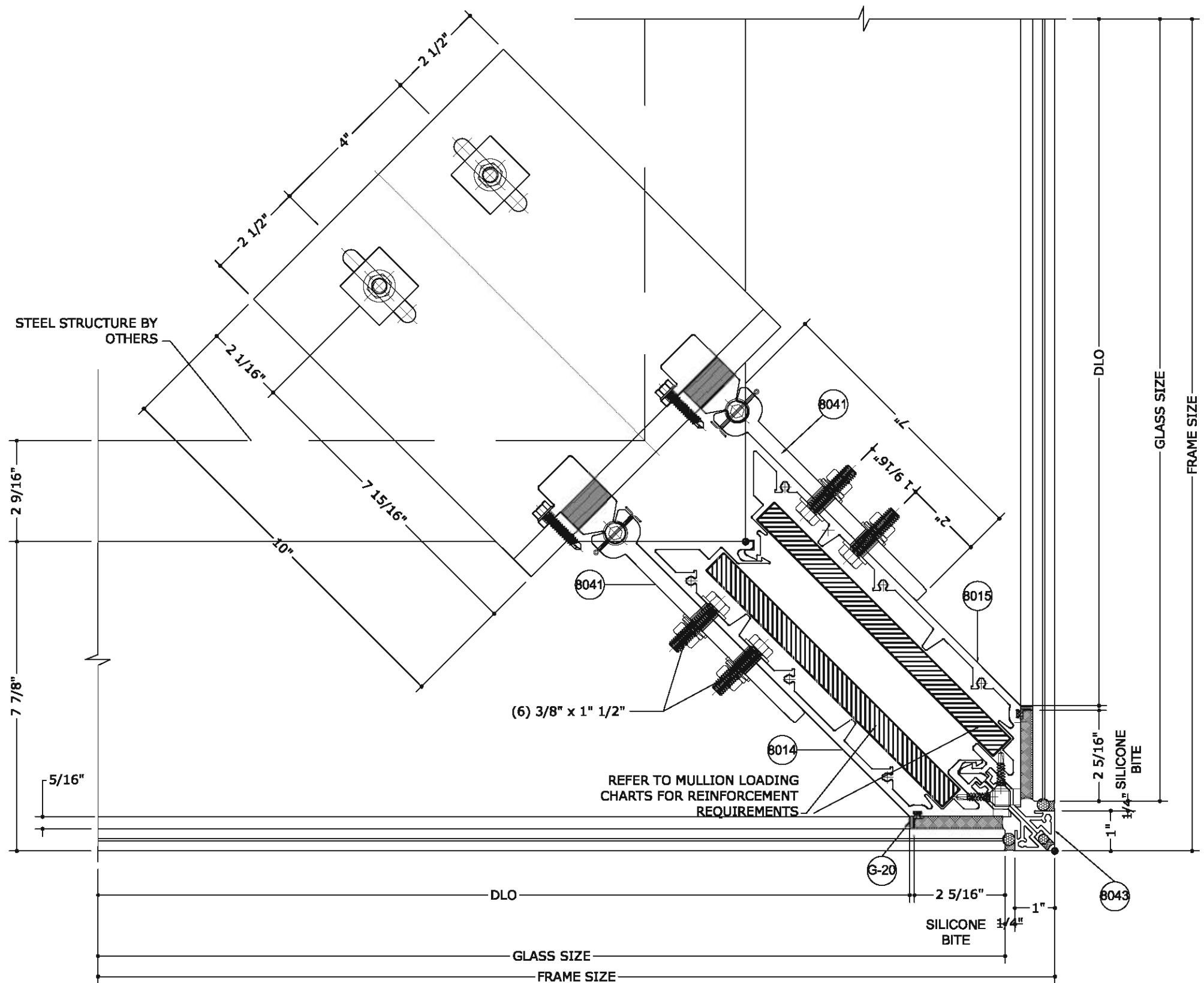
20-29341

20-29341

SCALE: NTS UNLESS NOTED

23

OF
64

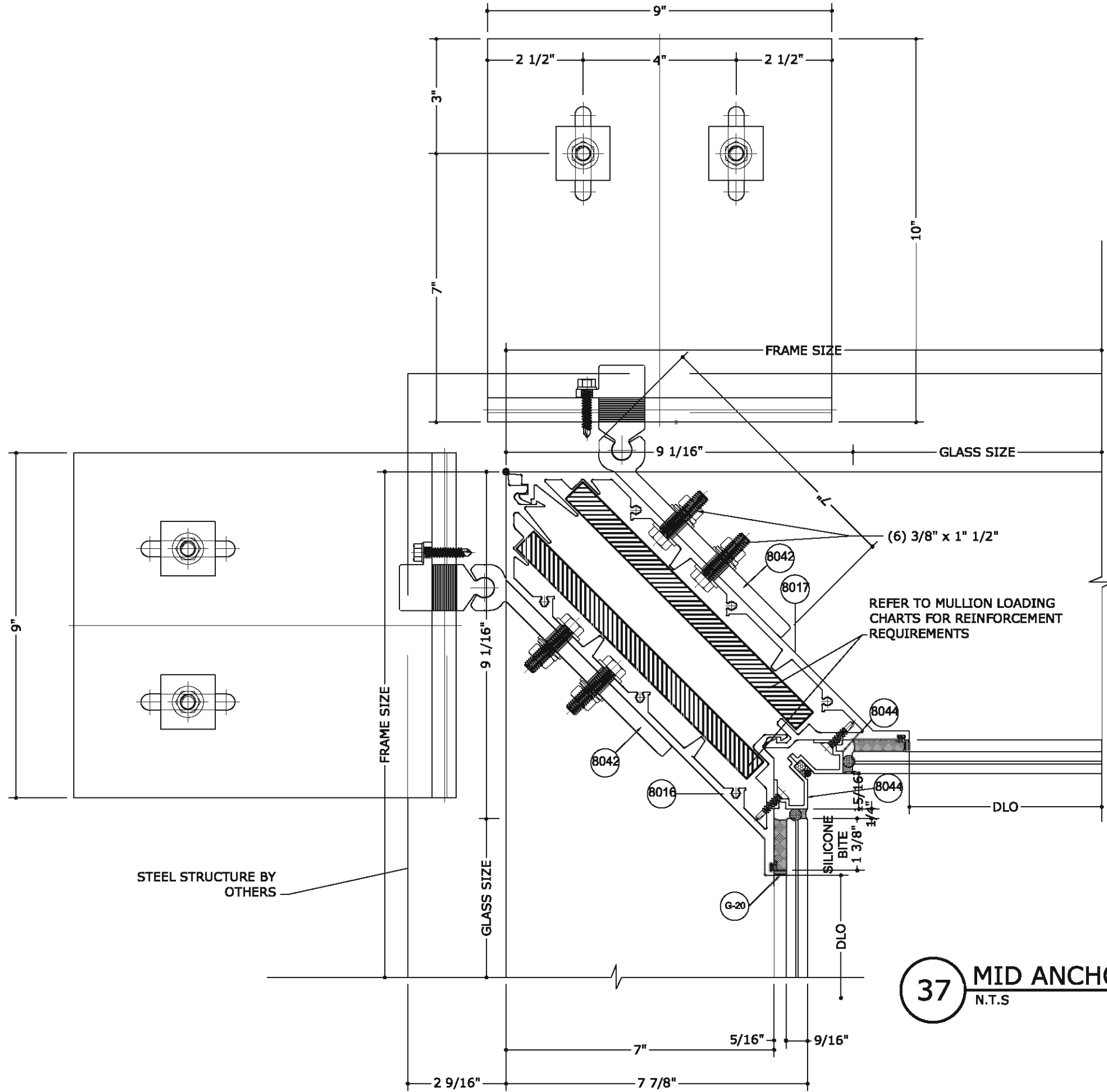


36 MID ANCHOR AT OUTSIDE CORNER
N.T.S

C:\Users\Francisco\Engineering\ExpressProduction - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg

Francisco

10/14/2020 - 12:01pm



37 MID ANCHOR AT OUTSIDE CORNER
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885

10/15/2025

ENGINEERING EXPRESS

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

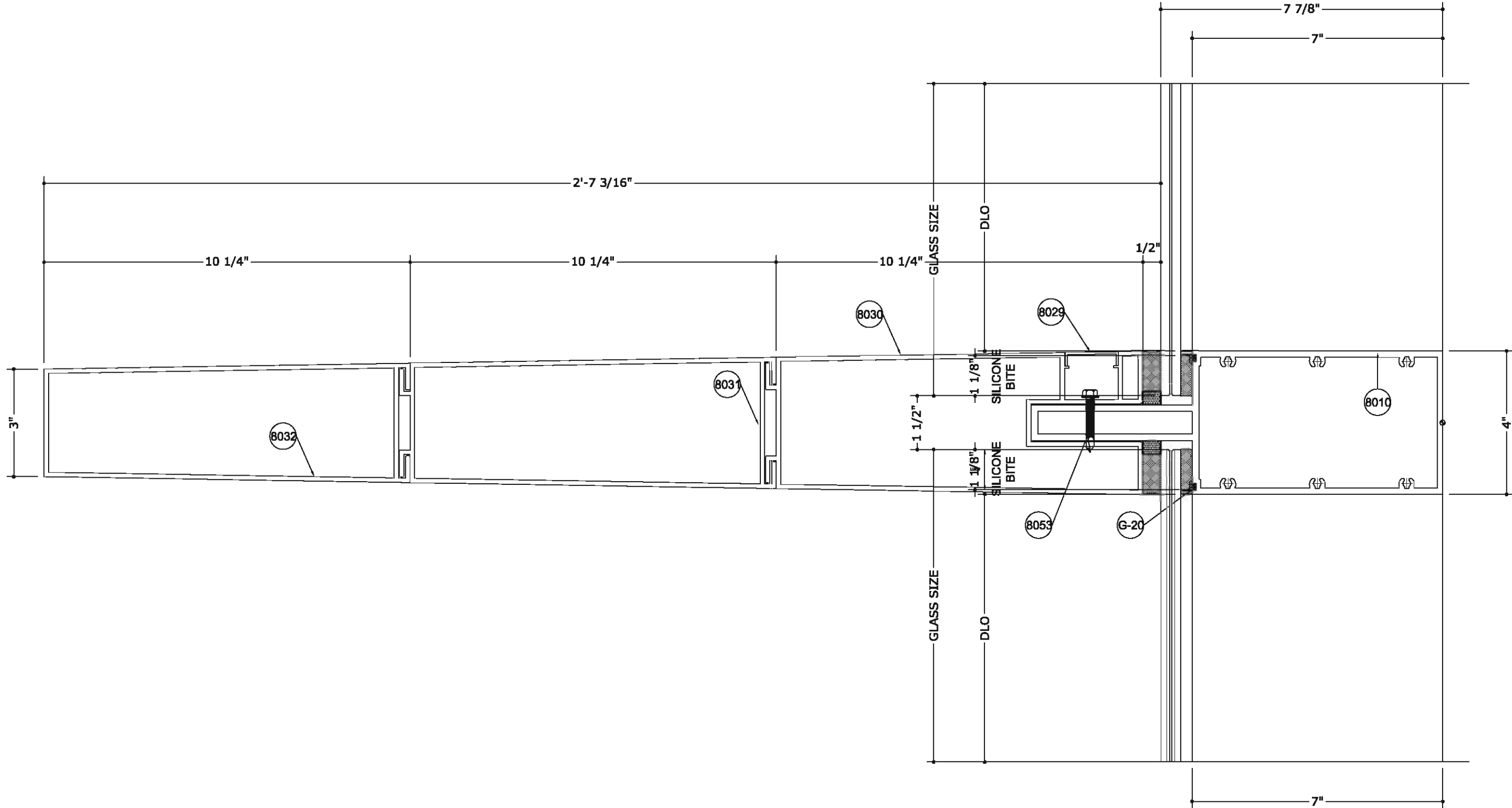
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

10/14/2020 - 12:02pm Francisco C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg



38 FIN DETAIL
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

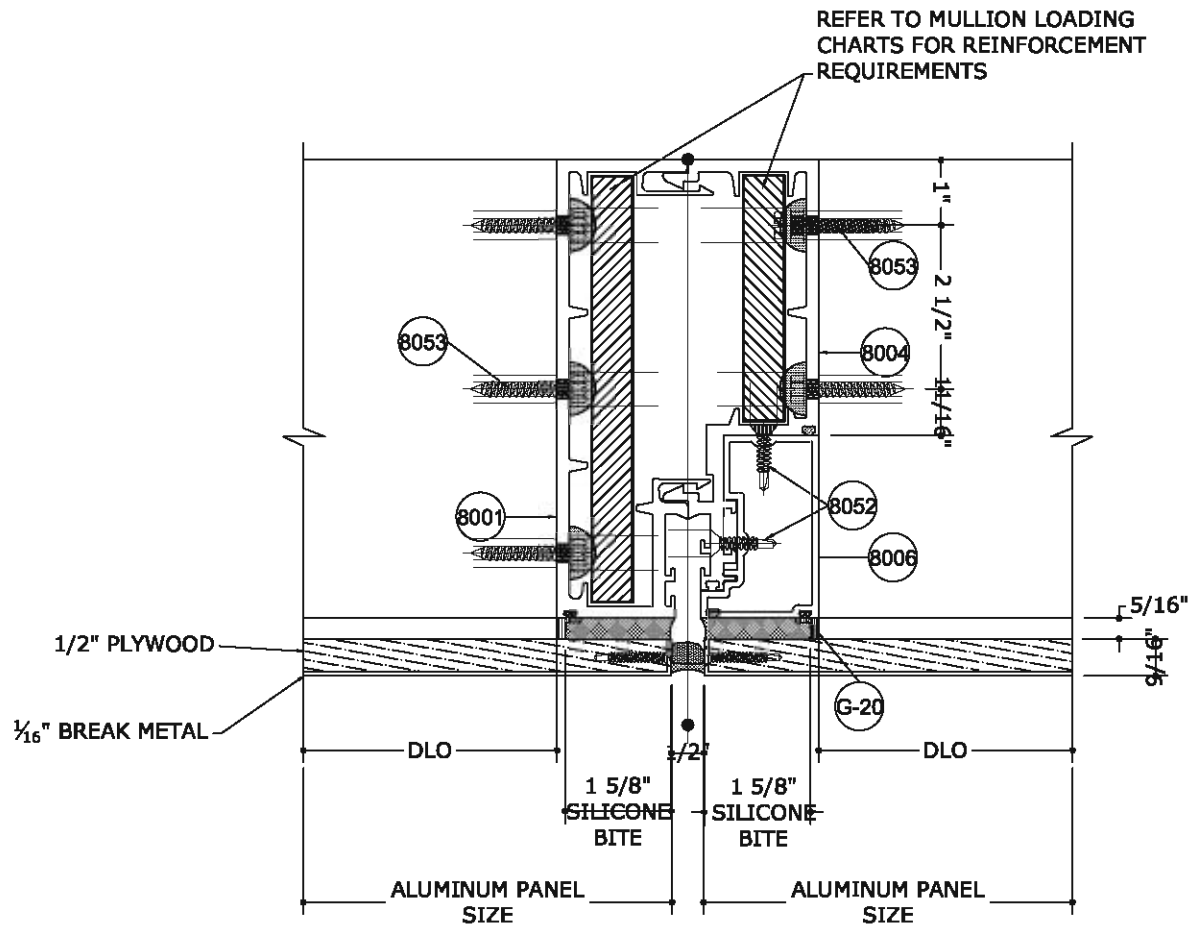
20-29341

SCALE: NTS UNLESS NOTED

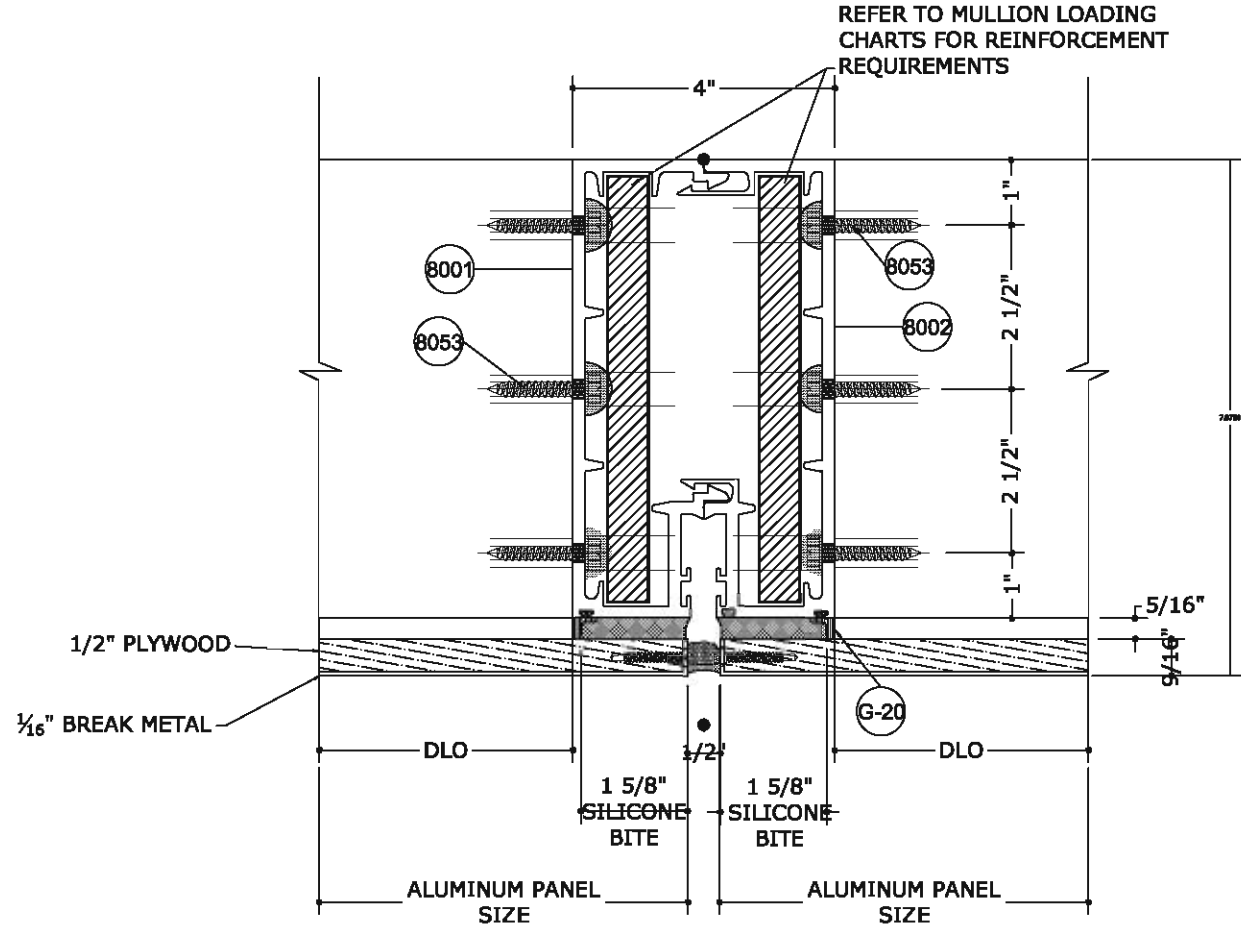
25

OF 64

C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:02pm Francisco



39 INTERMEDIATE VERTICAL WITH FILLER ADAPTOR
N.T.S



40 ALUMINUM PANEL DETAIL
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

UNITED GLASS SYSTEMS
2222 N.W. 43RD AVE.

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWIN	CHKD	DATE
INITIAL ISSUE	JEM	AJP	06/21/19
20200 FEB	CCB	AJP	10/13/20
-	-	-	-
-	-	-	-
-	-	-	-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS, AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

20-29341

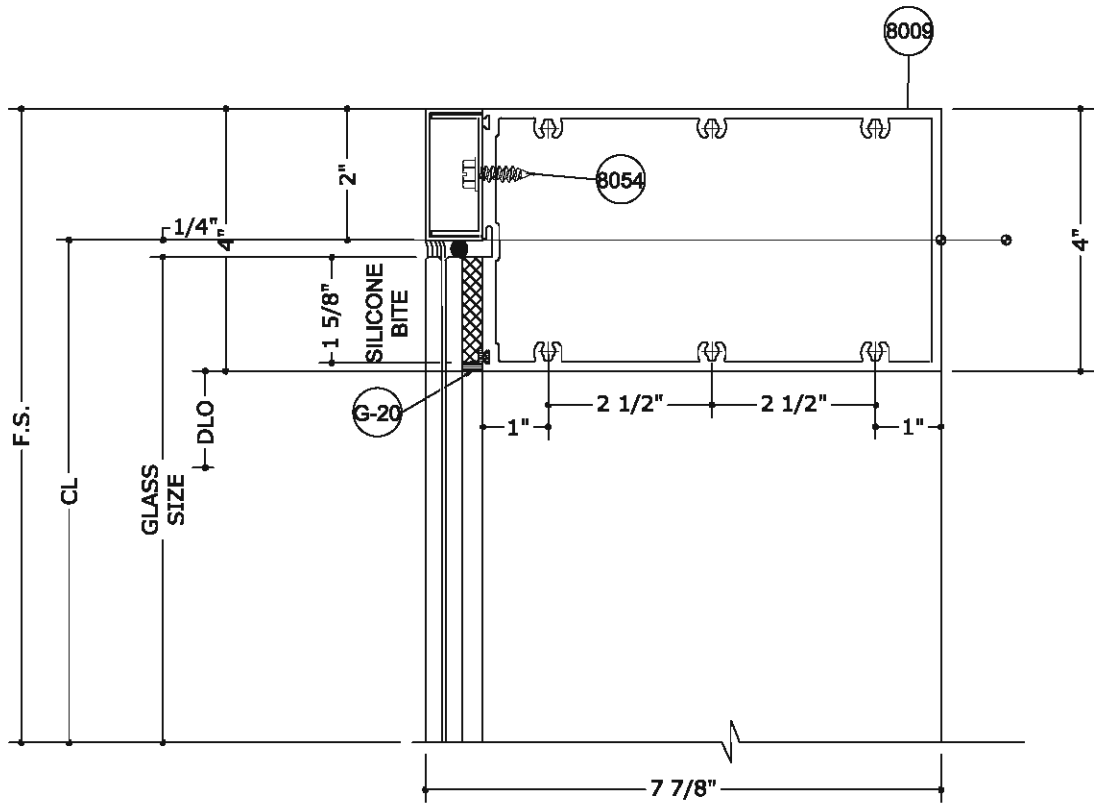
SCALE: NTS UNLESS NOTED

27

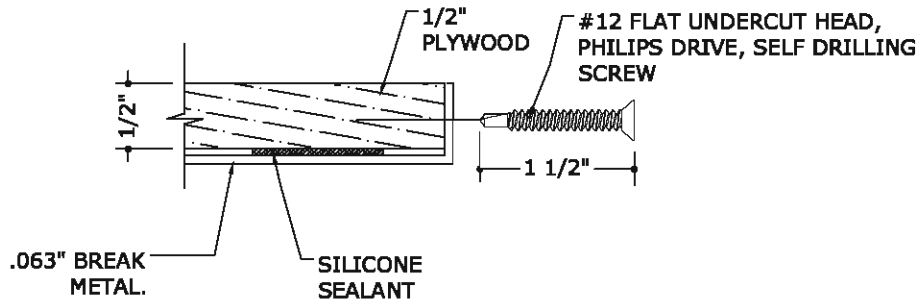
64



10/14/2020 - 12:02pm Francisco C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg



43 HEAD @ CANTELEVER
N.T.S



44 ALUMINUM PANEL DETAIL
N.T.S

FRANK BENARDO, PE
PE# 0046549 CA# 9885

10/15/2023

ENGINEERING
EXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
	-	-	-
	-	-	-
	-	-	-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

28

OF 64

GLASS LOADING TABLES (P.S.F.)

48 in		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	120
68	100	120
72	100	120
78	100	120
84	100	120
90	100	120
96	100	120
102	100	120
108	100	120
114	100	120
120	100	120
126	100	120
132	100	120
138	100	120
144	100	120
150	100	120
156	100	120
163	100	120
174	100	120
183	100	120
192	100	120
201	100	120

54 in		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	120
68	100	120
72	100	120
78	100	120
84	100	120
90	100	120
96	100	120
102	100	120
108	100	120
114	100	120
120	100	120
126	100	120
132	100	120
138	100	120
144	100	120
150	100	120
156	100	120
163	100	120
174	100	120

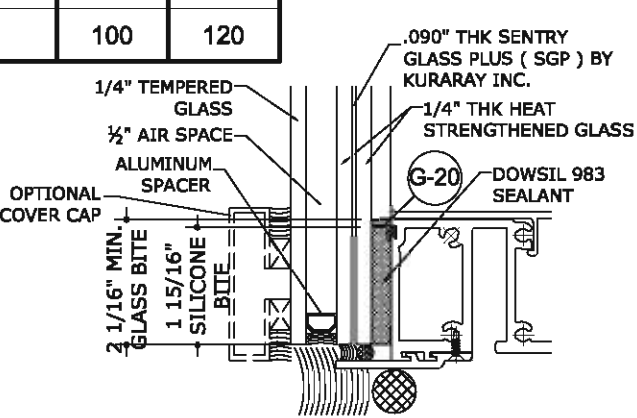
60 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	113
72	100	113
78	100	113
84	100	113
90	100	113
96	100	113
102	100	113
108	100	113
114	100	113
120	100	113
126	100	113
132	100	113
138	100	113
144	100	113
150	100	100
156	100	100
163	100	100

68in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	100	100
78	100	100
84	100	100
90	100	100
96	100	100
102	100	100
108	100	100
114	100	100
120	100	100
126	100	100
132	100	100
138	88	88

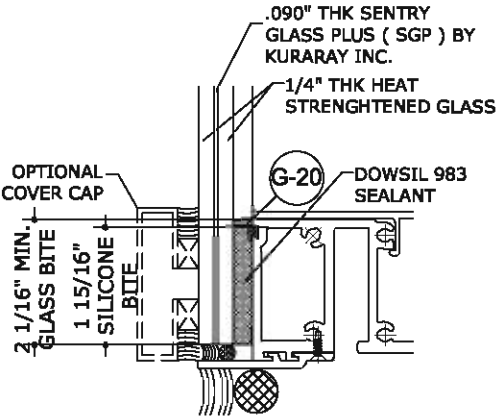
72 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	94	94
78	94	94
84	94	94
90	94	94
96	94	94
102	94	94
108	94	94
114	94	94
120	94	94
126	83	83
132	83	83

78 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	94	94
78	87	87
84	87	87
90	87	87
96	87	87
102	87	87
108	87	87
114	87	87
120	76	76

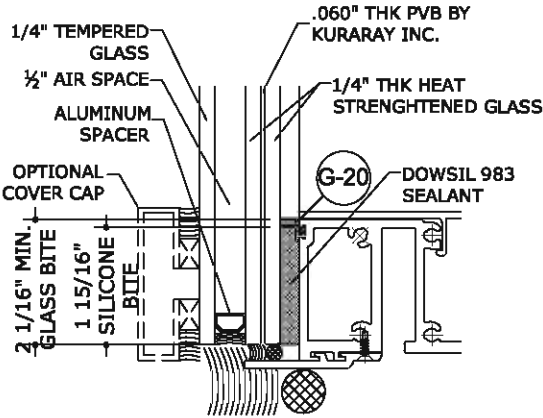
84 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	94	94
78	87	87
84	80	80
90	80	80
96	80	80
102	80	80
108	71	71
114	71	71



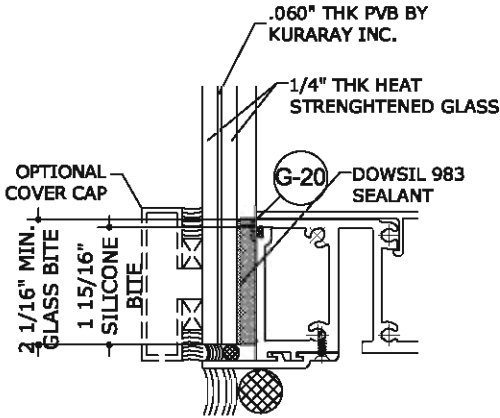
GLASS TYPE **A**
GLAZING DETAIL (LMI)
N.T.S.



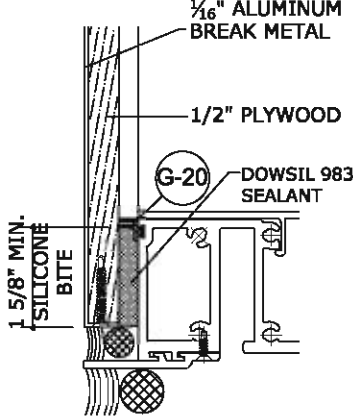
GLASS TYPE **B**
GLAZING DETAIL (LMI)
N.T.S.



GLASS TYPE **C**
GLAZING DETAIL (SMI)
N.T.S.



GLASS TYPE **D**
GLAZING DETAIL (SMI)
N.T.S.



PANEL TYPE **E**
GLAZING DETAIL (LMI & SMI)
N.T.S.
18.5 SQ. FT. MAX. PANEL SIZE

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

GLASS LOADING TABLES (P.S.F.)

90 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	94	94
78	87	87
84	80	80
90	75	75
96	75	75
102	66	66
108	66	66

96 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	94	94
78	87	87
84	80	80
90	75	75
96	62	62

102 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	94	94
78	87	87
84	80	80
90	66	66

108 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	94	94
78	87	87
84	71	71
90	66	66

114 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	94	94
78	87	87
84	71	71

120 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	94	94
78	76	76

126 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	83	83

132 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	113
68	100	100
72	83	83

138 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	110
60	100	100
68	88	88

144 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	100

150 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	100

156 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	100

163 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120
60	100	100

174 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120
54	100	120

183 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120

192 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120

201 in.		
HEIGHT		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
48	100	120

FRANK BENARDO, PE
PE# 0046549 CA# 9885



**ENGINEERING
EXPRESS®**

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
	-	-	-
	-	-	-
	-	-	-
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

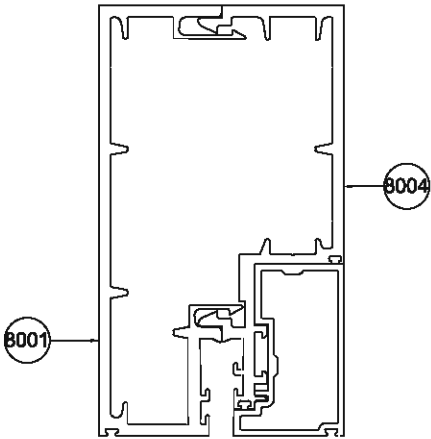
SCALE: NTS UNLESS NOTED

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

54 in			60 in			66 in			72 in			78 in			84 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120	60	100	120	60	100	120
66	100	120	66	100	120	66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120	72	100	120	72	100	120

90 in			96 in			102 in			108 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120
66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	66	100	120

NON REINFORCED MULLIONS



TYPE "A"

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885





CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

114 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	119

120 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	118

126 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	119
60	100	111

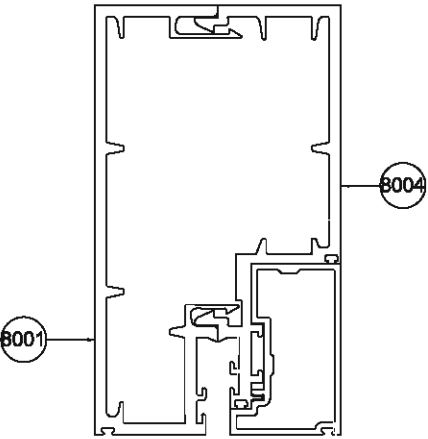
132 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	116
54	100	112

138 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	116
52	100	109
54	100	106

144 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	111
52	100	104

149 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	118
48	100	106
52	100	100

NON REINFORCED MULLIONS



TYPE "A"

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885

ENGINEERING EXPRESS

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
	-	-	-
	-	-	-
	-	-	-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

32

OF 64

NON-REINFORCED MULTI SPAN - MULLION LOADING TABLES (P.S.F.)

78 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

84 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

90 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

96 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

102 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

108 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

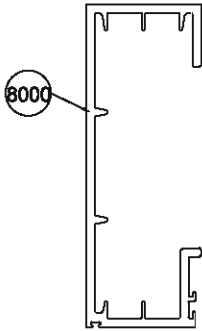
114 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

120 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

126 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

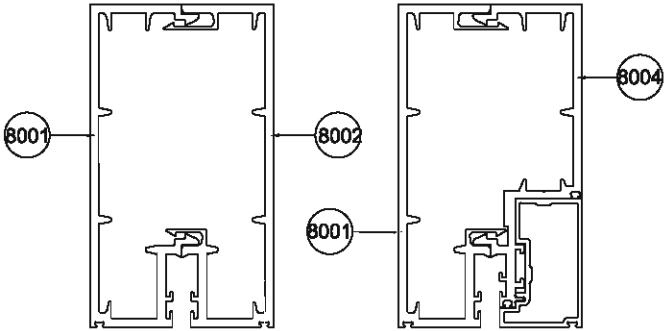
132 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

NON REINFORCED JAMB



JAMB TRIBUTARY WIDTH
W = W1

NON REINFORCED MULLIONS



MULLION TRIBUTARY WIDTH
 $W = \frac{W1}{2} + \frac{W2}{2}$

FRANK BENARDO, PE
PE# 0046549 CA# 9885





CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

NON-REINFORCED MULTI SPAN - MULLION LOADING TABLES (P.S.F.)

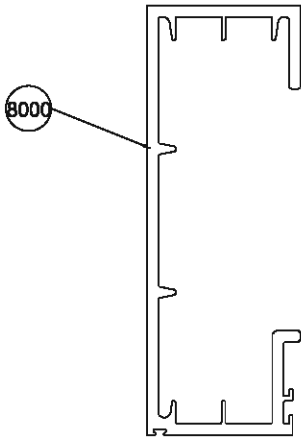
138 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

144 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

150 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90
72	83	83

156 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90

NON REINFORCED JAMB



JAMB TRIBUTARY WIDTH
W = W1

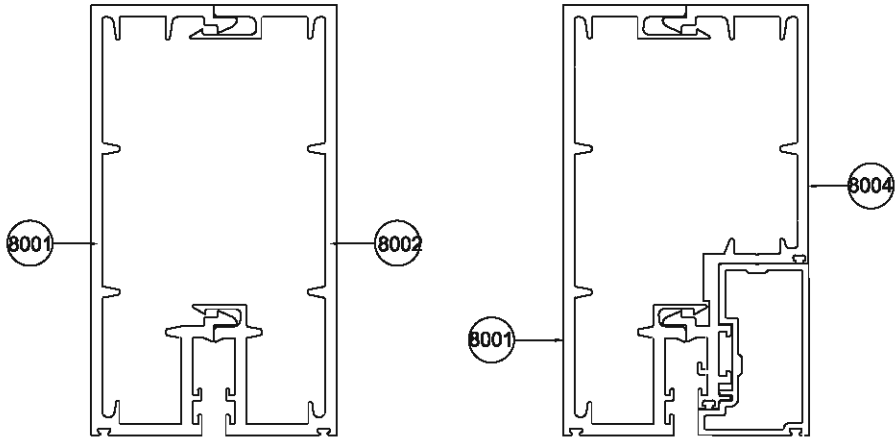
162 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100
66	90	90

168 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100

174 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	111
60	100	100

180 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	110
60	100	100

NON REINFORCED MULLIONS



TYPE "A"

TYPE "B"

MULLION TRIBUTARY WIDTH
 $W = \frac{W1}{2} + \frac{W2}{2}$

FRANK BENARDO, PE
PE# 0046549 CA# 9885

FRANK L. BENARDO
LICENSE
10752028
PROFESSIONAL ENGINEER
STATE OF FLORIDA

ENGINEERING
EXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

34

OF 64

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

54 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

60 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

66 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

72 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

78 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

84 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

90 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

96 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

102 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

108 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	120

114 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	119
72	100	113

120 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	118
66	100	111
72	100	105

126 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	119
60	100	111
66	100	104
72	98	98

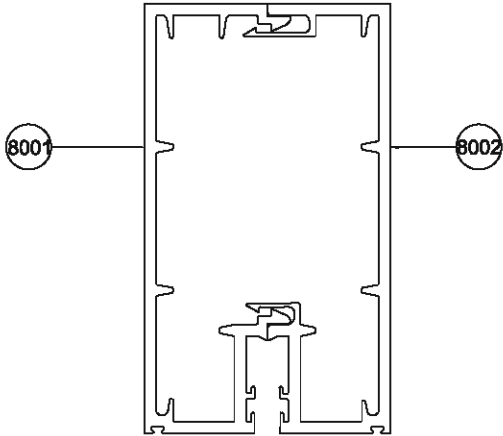
132 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	116
54	100	112
60	100	104
66	97	97
72	92	92

138 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	116
52	100	109
54	100	106
60	98	98
66	92	92
72	87	87

144 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	111
52	100	104
54	100	101
60	93	93
66	87	87
72	80	80

149 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	118
48	100	106
52	100	100
54	96	96
60	87	87
66	80	80
72	75	75

NON REINFORCED MULLIONS



MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

35 OF 64

NON-REINFORCED MULTI SPAN - MULLION LOADING TABLES (P.S.F.)

78 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
46	100	120
54	100	120
60	100	110
66	100	100
72	91	91

84 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	120
60	100	110
66	100	100
72	91	91

90 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	120
60	100	110
66	100	100
72	91	91

96 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	120
60	100	110
66	100	100
72	91	91

102 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	120
60	100	110
66	100	100
72	91	91

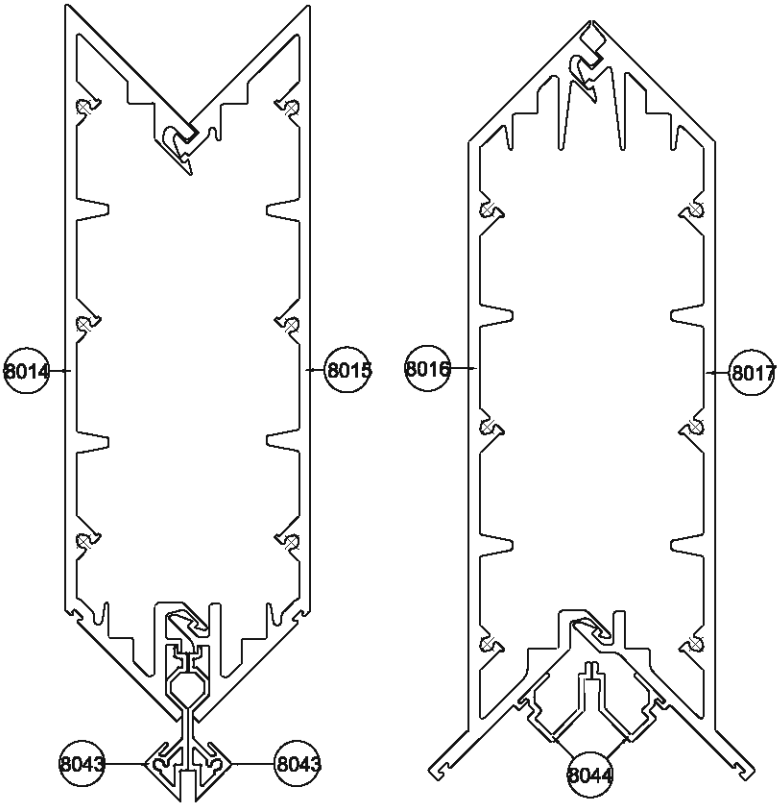
108 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	120
60	100	110
66	100	100
72	91	91

114 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
46	100	120
54	100	120
60	100	110
66	100	100
72	91	91

120 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	120
60	100	110
66	100	100
72	91	91

126 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	120
60	100	110
66	100	100
72	91	91

132 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120
30	100	120
36	100	120
42	100	120
48	100	120
54	100	120
60	100	110
66	100	100
72	91	91



TYPE "A"

TYPE "B"

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING
EXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

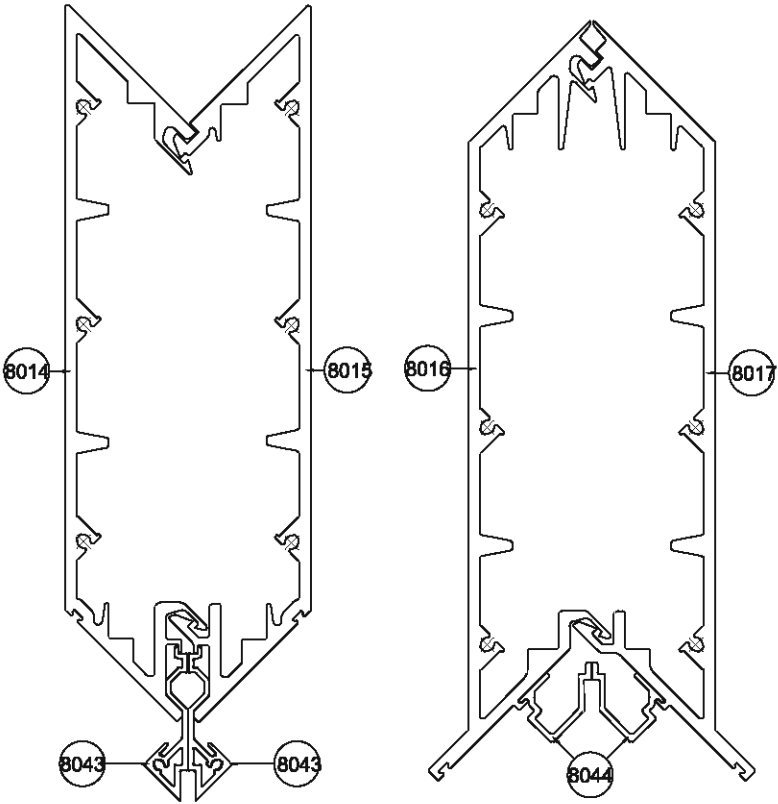
20-29341

SCALE: NTS UNLESS NOTED

NON-REINFORCED MULTI SPAN - MULLION LOADING TABLES (P.S.F.)

138 in			144 in			150 in.			150 in.			156 in.		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120	24	100	120	24	100	120	24	100	120	24	100	120
30	100	120	30	100	120	30	100	120	30	100	120	30	100	120
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120
60	100	110	60	100	110	60	100	110	60	100	110	60	100	110
66	100	100	66	100	100	66	100	100	66	100	100	66	100	100
72	91	91	72	91	91	72	91	91	72	91	91	72	91	91

162 in			168 in			174 in.			180 in.		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	100	120	24	100	120	24	100	120	24	100	120
30	100	120	30	100	120	30	100	120	30	100	120
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120
54	100	120	54	100	120	54	100	120	54	100	120
60	100	110	60	100	110	60	100	110	60	100	109
66	100	100	66	100	100	66	100	100	66	100	100
72	91	91									



TYPE "A"

TYPE "B"

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885

ENGINEERING EXPRESS®
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

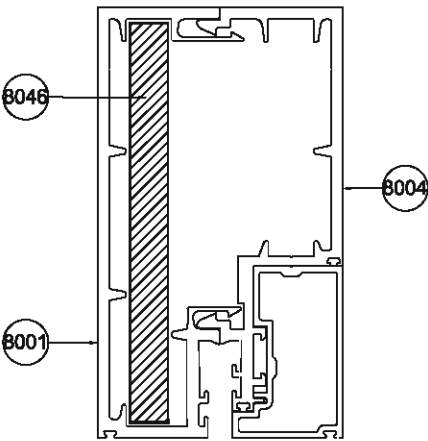
37 OF 64

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

54 in			60 in			66 in			72 in			78 in			84 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120	60	100	120	60	100	120
66	100	120	66	100	120	66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120	72	100	120	72	100	120

90 in			96 in			102 in			108 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120
66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120

ALUMINUM REINFORCED MULLIONS



TYPE "A"

NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERINGEXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

38

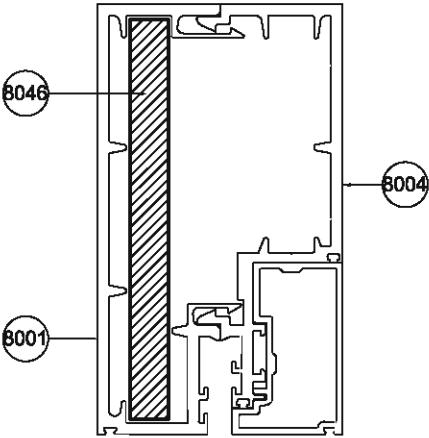
OF 64

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

114 in			120 in			126 in			132 in			138 in			144 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	116
60	100	120	60	100	120	60	100	120	60	100	120	60	100	120	60	100	116
66	100	120	66	100	120	66	100	120	66	100	120	66	100	113	66	100	107
72	100	120	72	100	120	66	100	120	66	100	113						

149 in			156 in			162 in			168 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	119
48	100	120	48	100	116	48	100	111	48	100	106
52	100	115	52	100	109	52	100	104	52	100	100
54	100	112	54	100	106						

ALUMINUM REINFORCED MULLIONS



TYPE "A"

NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885

10/15/2019

ENGINEERING EXPRESS

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

39

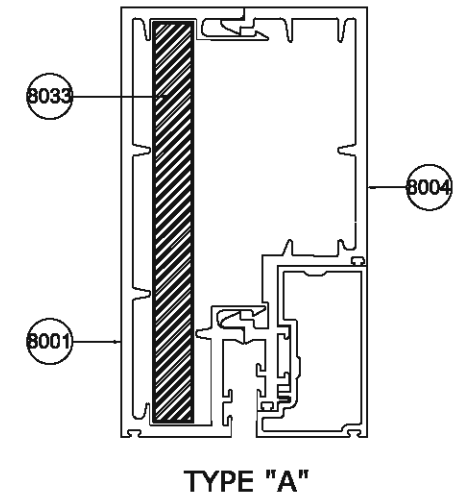
OF 64

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

54 in			60 in			66 in			72 in			78 in			84 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120	60	100	120	60	100	120
64	100	120	64	100	120	64	100	120	64	100	120	64	100	120	64	100	120
66	100	120	66	100	120	66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120	72	100	120	72	100	120

90 in			96 in			102 in			108 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120
64	100	120	64	100	120	64	100	120	64	100	120
66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120

STEEL REINFORCED MULLIONS



NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW 1/4" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

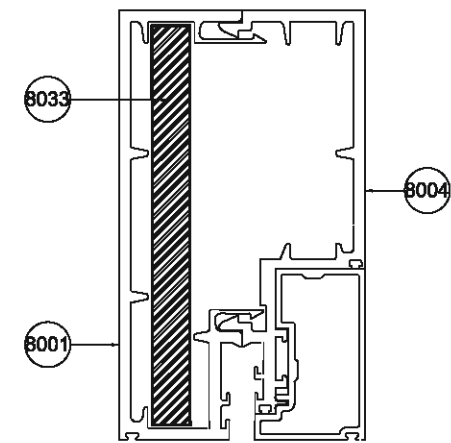
SCALE: NTS UNLESS NOTED

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

114 in			120 in			126 in			132 in			138 in			144 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120	60	100	120	60	100	120
64	100	120	64	100	120	64	100	120	64	100	120	64	100	120	64	100	120
66	100	120	66	100	120	66	100	120	66	100	120	66	100	120	66	100	118
72	100	120	72	100	120	72	100	120	72	100	120	72	100	118	72	100	111

149 in			156 in			162 in			168 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	117
54	100	120	54	100	120	54	100	119	54	100	114
60	100	120	60	100	115	60	100	109	60	100	105
64	100	116	64	100	109	64	100	104	64	100	100
66	100	113	66	100	107	66	100	102			
72	100	106									

STEEL REINFORCED MULLIONS



TYPE "A"

NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERINGEXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

66 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

72 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

78 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

84 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

90 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

96 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

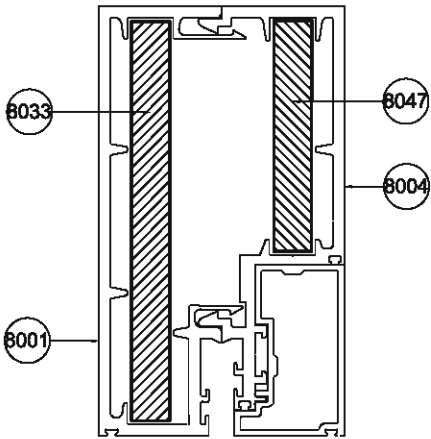
102 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

108 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

114 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

120 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

STEEL REINFORCED MULLIONS



TYPE "A"

NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

126 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
80	100	120
64	100	120
66	100	119
72	100	113

132 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
80	100	120
64	100	114
66	100	112
72	100	106

138 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	113
64	100	108
66	100	106
72	100	100

144 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	119
54	100	116
80	100	107
64	100	102
66	100	100
72	94	94

150 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	114
54	100	110
60	100	102
64	97	97
66	95	95
72	89	89

156 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	116
52	100	108
54	100	105
80	97	97
64	92	92
66	90	90
72	85	85

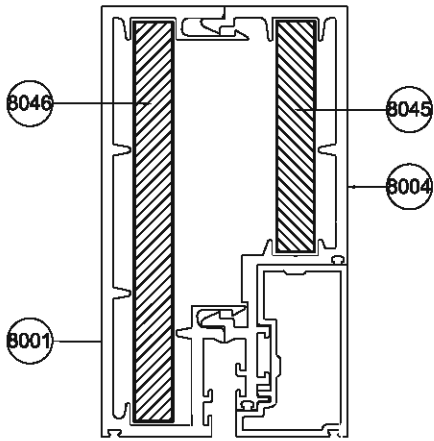
162 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	111
52	100	104
54	100	100
80	92	92
64	88	88
66	86	86
72	81	81

168 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	119
48	100	106
52	99	99
54	96	96
80	88	88
64	84	84
66	82	82
72	77	77

174 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	114
48	100	102
52	95	95
54	92	92
60	85	85
64	80	80
66	78	78
72	72	72

180 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	110
48	98	98
52	90	90
54	87	87
80	79	79
64	74	74
66	72	72
72	67	67

ALUMINUM REINFORCED MULLIONS



TYPE "A"

NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

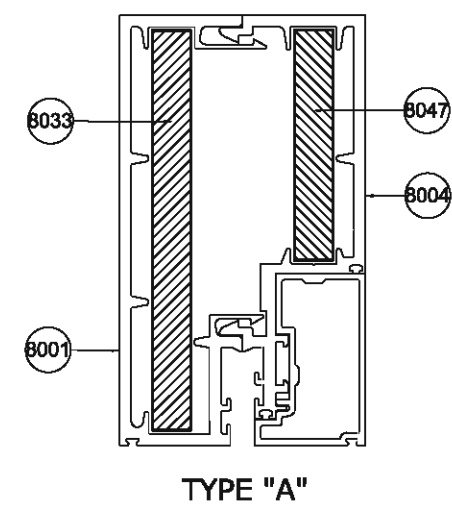
SCALE: NTS UNLESS NOTED

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

66 in			72 in			78 in.			84 in.			90 in			96 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120	60	100	120	60	100	120
64	100	120	64	100	120	64	100	120	64	100	120	64	100	120	64	100	120
66	100	120	66	100	120	66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120	72	100	120	72	100	120

102 in.			108 in.			114 in			120 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120
64	100	120	64	100	120	64	100	120	64	100	120
66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120

STEEL REINFORCED MULLIONS



NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

44

OF 64

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

126 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

132 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

138 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

144 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

150 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

156 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

162 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120

168 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	118

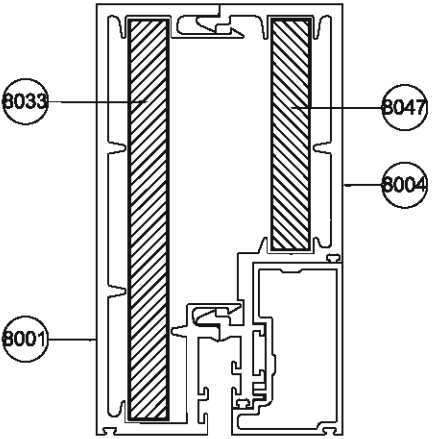
174 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	120
72	100	113

180 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
66	100	115
72	100	108

186 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
54	100	120
60	100	120
66	100	111
72	100	104

192 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
54	100	120
60	100	115
66	100	107
72	100	100

STEEL REINFORCED MULLIONS



TYPE "A"

NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

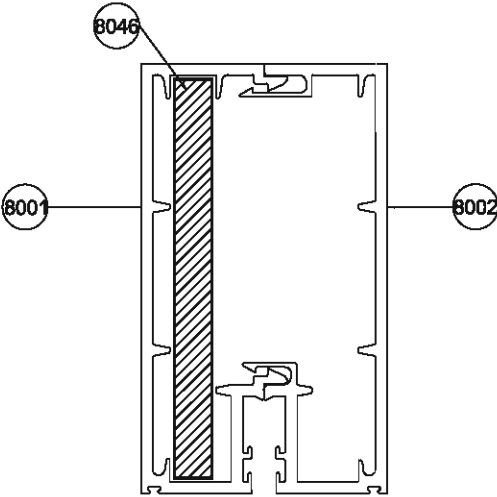
45 OF 64

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

54 in			60 in			66 in			72 in			78 in			84 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120	60	100	120	60	100	120
66	100	120	66	100	120	66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120	72	100	120	72	100	120

90 in			96 in			102 in			108 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120
66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120

ALUMINUM REINFORCED MULLIONS



NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

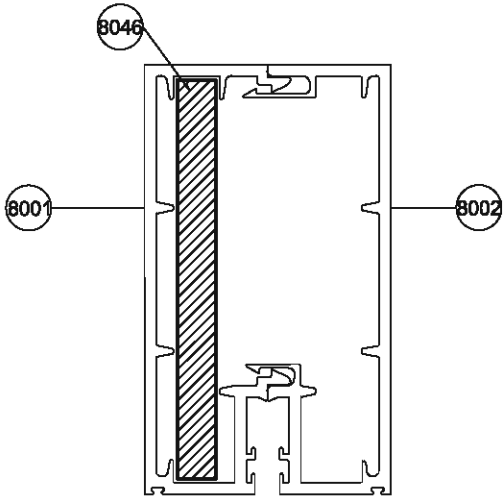
46 OF 64

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

114 in			120 in			126 in			132 in			138 in			144 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	116
60	100	120	60	100	120	60	100	120	60	100	120	60	100	113	60	100	107
66	100	120	66	100	120	66	100	120	66	100	113	66	100	106	66	100	100
72	100	120	72	100	120	72	100	113	72	100	106	72	100	100	72	94	94

149 in			156 in			162 in			168 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	119
48	100	120	48	100	116	48	100	111	48	100	106
52	100	115	52	100	109	52	100	104	52	100	100
54	100	112	54	100	106	54	100	101	54	96	96
60	100	103	60	97	97	60	93	93	60	87	87
66	96	96	66	90	90	66	86	86	66	80	80
72	90	90	72	85	85	72	80	80	72	74	74

ALUMINUM REINFORCED MULLIONS



NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE	THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.
	JEM	AJP	06/21/19	
	CCB	AJP	10/13/20	
INIT	ISSUE	2020 FBC		

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

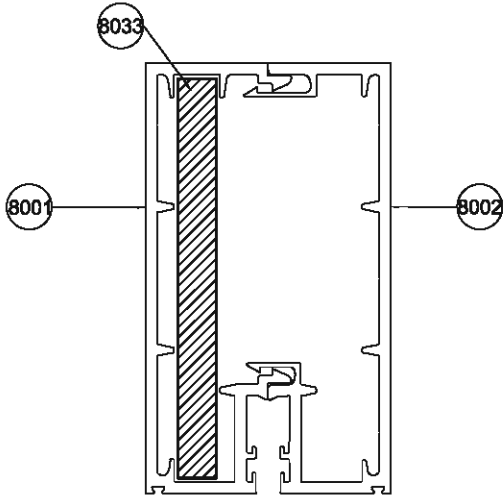
47 OF 64

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

54 in			60 in			66 in			72 in			78 in			84 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120	60	100	120	60	100	120
64	100	120	64	100	120	64	100	120	64	100	120	64	100	120	64	100	120
66	100	120	66	100	120	66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120	72	100	120	72	100	120

90 in			96 in			102 in			108 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120
64	100	120	64	100	120	64	100	120	64	100	120
66	100	120	66	100	120	66	100	120	66	100	120
72	100	120	72	100	120	72	100	120	72	100	120

STEEL REINFORCED MULLIONS



NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING
EXPRESS

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

48

OF 64

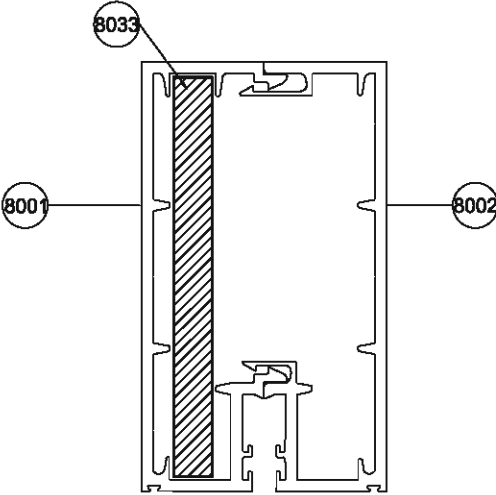
SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

114 in			120 in			126 in			132 in			138 in			144 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	120	52	100	120	52	100	120
54	100	120	54	100	120	54	100	120	54	100	120	54	100	120	54	100	120
60	100	120	60	100	120	60	100	120	60	100	120	60	100	120	60	100	120
64	100	120	64	100	120	64	100	120	64	100	120	64	100	120	64	100	120
66	100	120	66	100	120	66	100	120	66	100	120	66	100	120	66	100	118
72	100	120	72	100	120	72	100	120	72	100	120	72	100	118	72	100	111

149 in			156 in			162 in			168 in		
SPAN LENGTH			SPAN LENGTH			SPAN LENGTH			SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F	WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120	36	100	120	36	100	120	36	100	120
42	100	120	42	100	120	42	100	120	42	100	120
48	100	120	48	100	120	48	100	120	48	100	120
52	100	120	52	100	120	52	100	120	52	100	117
54	100	120	54	100	120	54	100	119	54	100	114
60	100	120	60	100	115	60	100	109	60	100	105
64	100	116	64	100	109	64	100	104	64	100	100
66	100	113	66	100	107	66	100	102	66	97	97
72	100	106	72	100	100	72	95	95	72	90	90

NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

STEEL REINFORCED MULLIONS



MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

49 OF 64

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

66 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

72 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

78 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

84 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

90 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

96 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

102 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

108 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

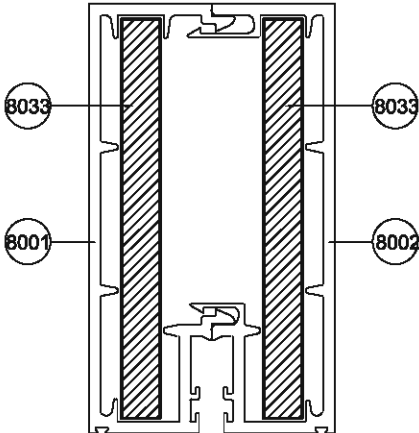
114 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

120 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

126 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

132 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

STEEL REINFORCED MULLIONS



TYPE "A"

NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

SINGLE SPAN MULLION LOADING TABLES (P.S.F.)

138 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

144 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

150 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

156 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

162 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

168 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

174 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	120

180 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	120
82	100	117

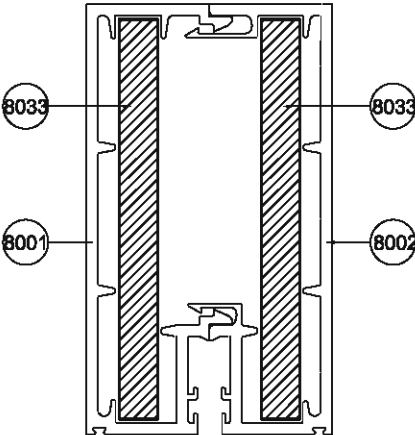
186 in		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	116
82	100	112

192 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	120
78	100	112
82	100	108

198 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	120
72	100	114
78	100	108
82	100	104

204.5 in.		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
36	100	120
42	100	120
48	100	120
52	100	120
54	100	120
60	100	120
64	100	120
66	100	118
72	100	110
78	100	103
82	100	100

STEEL REINFORCED MULLIONS



TYPE "A"

MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

NOTE: REINFORCEMENT MUST BE CONTINUOUS AND PLACED 6" FROM TOP AND BOTTOM ENDS. FOR MULTI-SPAN CONFIGURATION, ALLOW ¼" CLEARANCE BETWEEN MID ANCHOR SLEEVE & REINFORCEMENT END.

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.			

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

REINFORCED MULTI-SPAN MULLION LOADING TABLES (P.S.F.)
WITH NON REINFORCED JAMBS

78 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

84 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

90 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

96 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

102 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

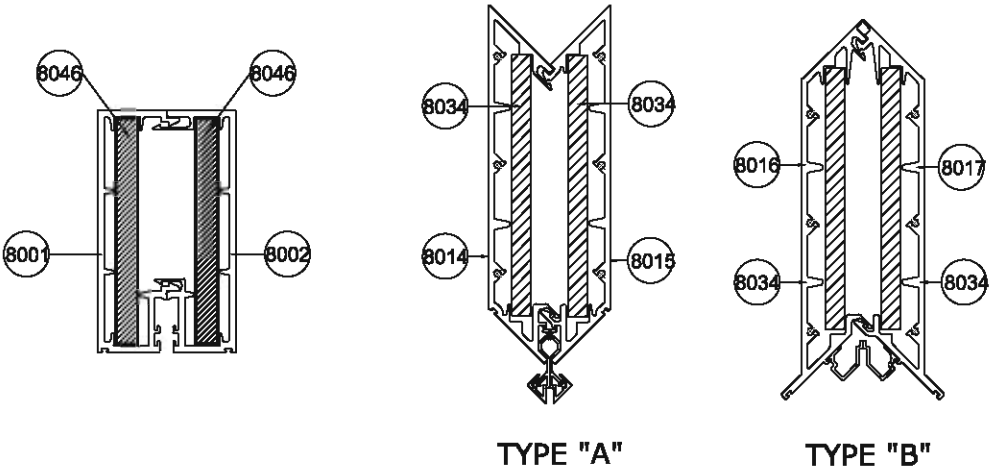
108 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

114 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

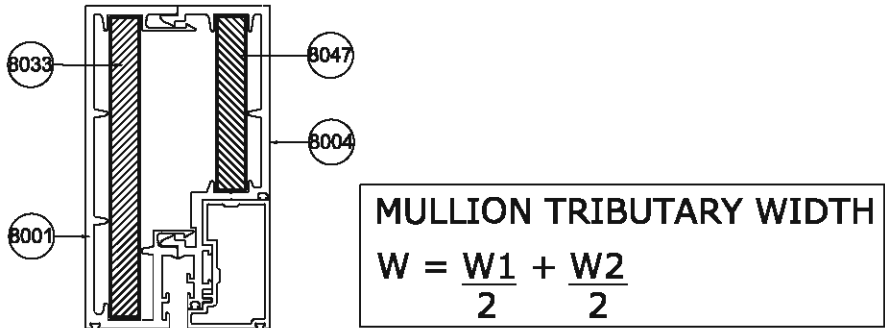
120 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

NOTE: REINFORCEMENT MUST BE CONTINUOUS
AND PLACED 6" FROM TOP AND BOTTOM ENDS.
FOR MULTI-SPAN CONFIGURATION, ALLOW ¼"
CLEARANCE BETWEEN MID ANCHOR SLEEVE &
REINFORCEMENT END.

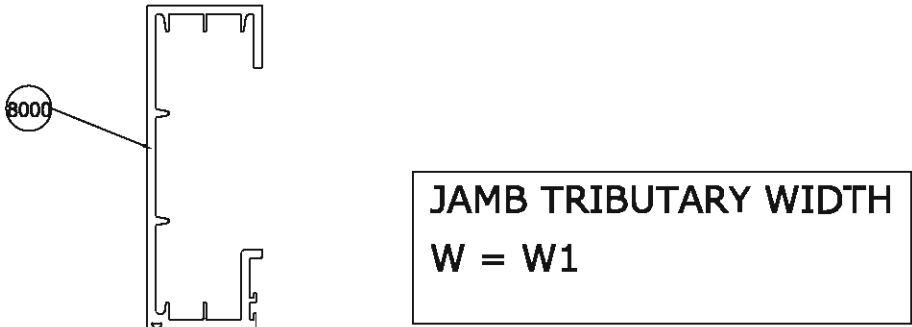
ALUMINUM REINFORCED MULLIONS



STEEL REINFORCED MULLIONS



NON REINFORCED JAMB



FRANK BENARDO, PE
PE# 0046549 CA# 9885

10/15/2019

ENGINEERING
EXPRESS

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS
AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT
WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,
ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT
PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

52

64

REINFORCED MULTI-SPAN MULLION LOADING TABLES (P.S.F.)
WITH NON REINFORCED JAMBS

126 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

132 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

138 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

144 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

150 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

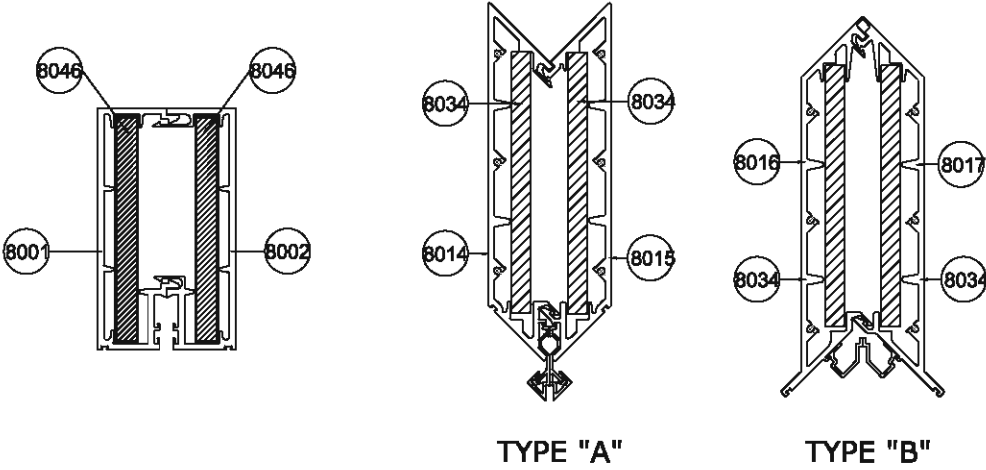
156 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

162 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

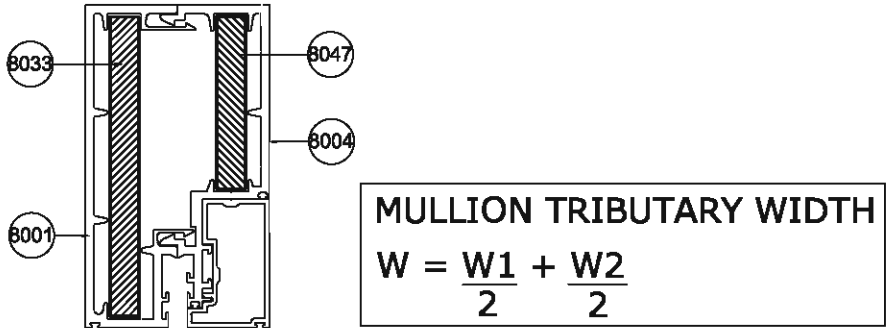
168 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

NOTE: REINFORCEMENT MUST BE CONTINUOUS
AND PLACED 6" FROM TOP AND BOTTOM ENDS.
FOR MULTI-SPAN CONFIGURATION, ALLOW 1/4"
CLEARANCE BETWEEN MID ANCHOR SLEEVE &
REINFORCEMENT END.

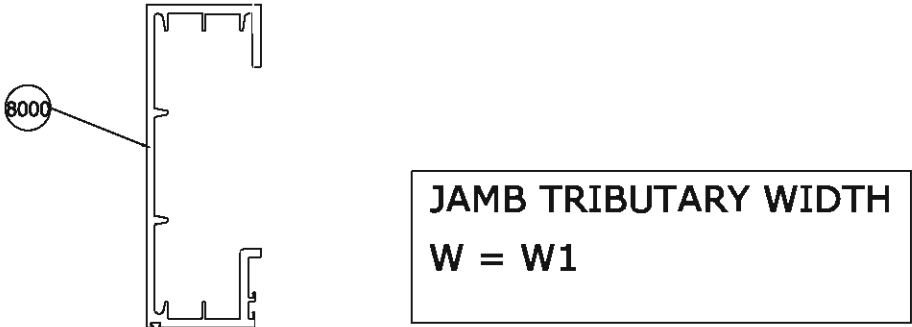
ALUMINUM REINFORCED MULLIONS



STEEL REINFORCED MULLIONS



NON REINFORCED JAMB



FRANK BENARDO, PE
PE# 0046549 CA# 9885

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE	THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.
	JEM	AJP	06/21/19	
	CCB	AJP	10/13/20	
INIT ISSUE	2020 FBC			
COPYRIGHT ENGINEERING EXPRESS®				
20-29341				
SCALE: NTS UNLESS NOTED				
53 OF 64				

REINFORCED MULTI-SPAN MULLION LOADING TABLES (P.S.F.)
 WITH NON REINFORCED JAMBS

174 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

180 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

186 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

192 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

198 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

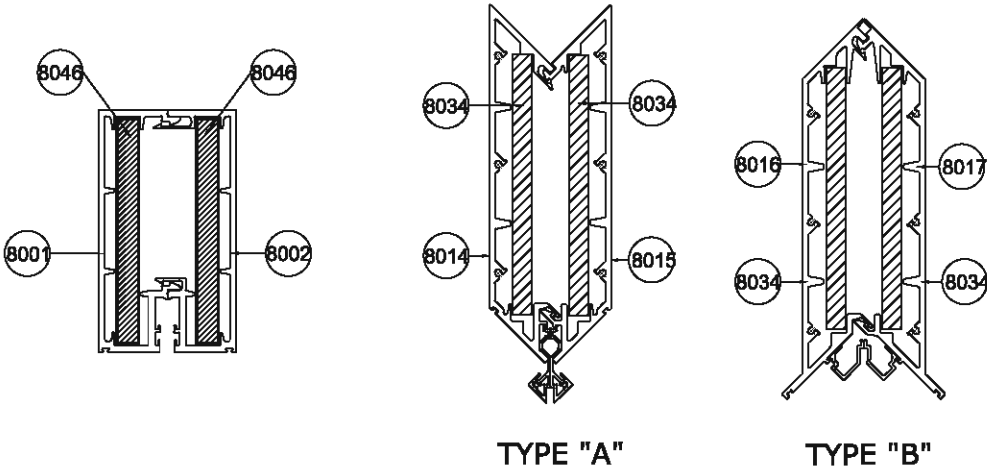
204 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

210 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	120	120
66	109	109
72	100	100

216 (in.)		
SPAN LENGTH		
WIDTH (in.)	(+) P.S.F	(-) P.S.F
24	120	120
30	120	120
36	120	120
42	120	120
48	120	120
54	120	120
60	118	118
66	108	108
72	100	100

NOTE: REINFORCEMENT MUST BE CONTINUOUS
 AND PLACED 6" FROM TOP AND BOTTOM ENDS.
 FOR MULTI-SPAN CONFIGURATION, ALLOW ¼"
 CLEARANCE BETWEEN MID ANCHOR SLEEVE &
 REINFORCEMENT END.

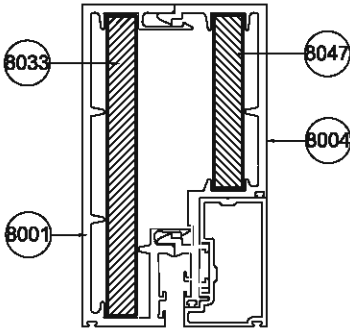
ALUMINUM REINFORCED MULLIONS



MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

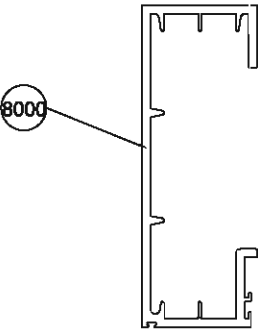
STEEL REINFORCED MULLIONS



MULLION TRIBUTARY WIDTH

$$W = \frac{W1}{2} + \frac{W2}{2}$$

NON REINFORCED JAMB



JAMB TRIBUTARY WIDTH

$$W = W1$$

FRANK BENARDO, PE
 PE# 0046549 CA# 9885

CORPORATE OFFICE:
 160 SW 12th AVE, SUITE 106
 DEERFIELD BEACH, FL 33442
 (954) 354-0660 | (866) 396-9999
 TEAM@ENGINEERINGEXPRESS.COM
 ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
 3776 NW 124TH AVE.
 CORAL SPRINGS, FL 33065
 (754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
 FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20

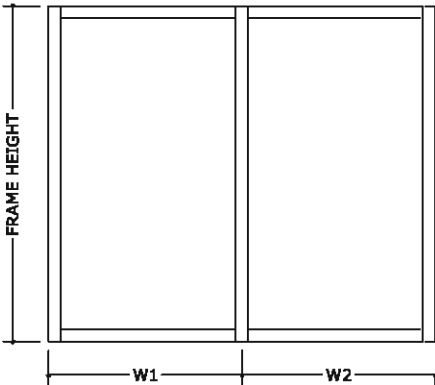
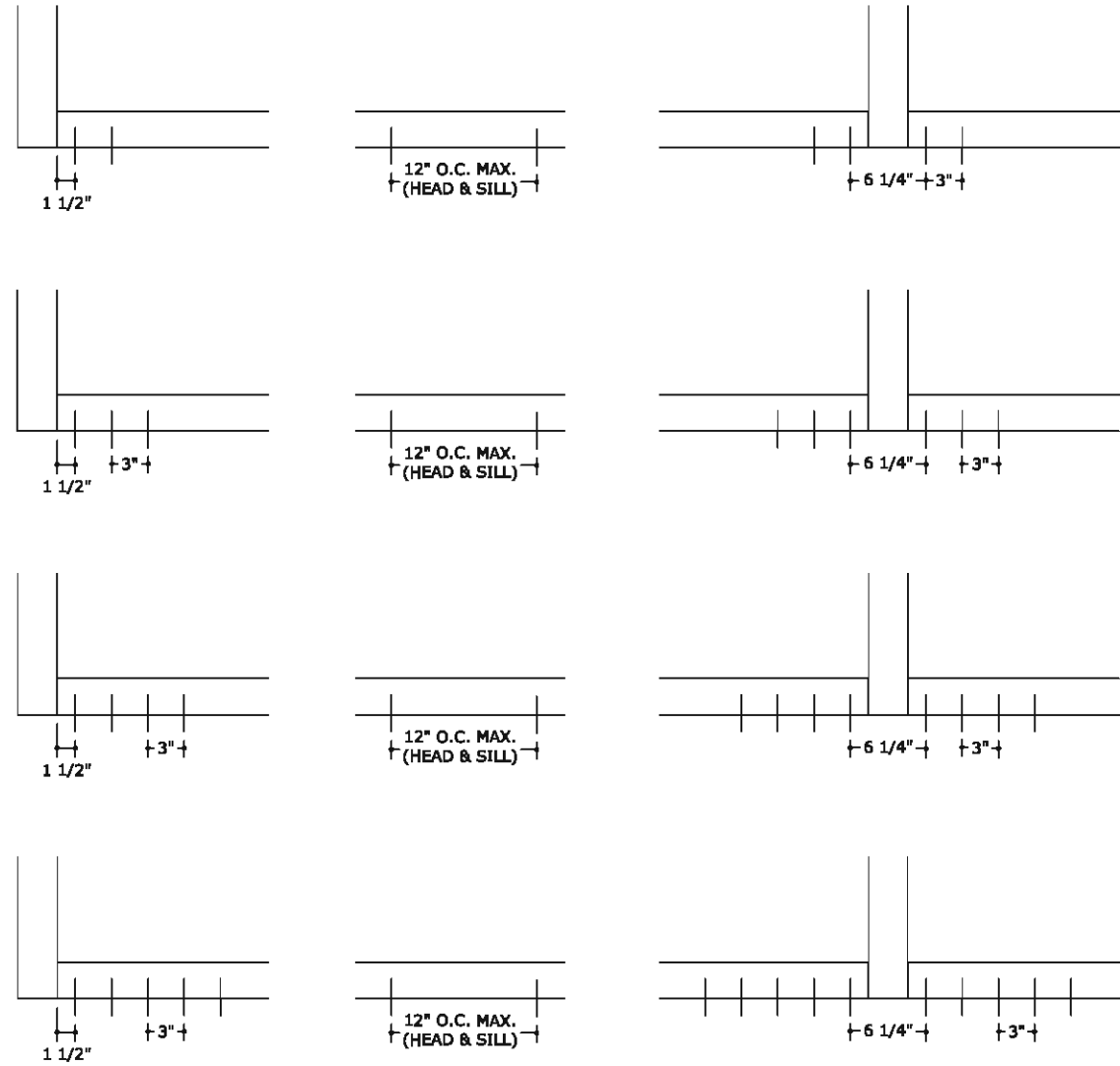
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS
 AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT
 WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS,
 ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT
 PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®
 20-29341
 SCALE: NTS UNLESS NOTED
 54 OF 64

ANCHOR LOAD CAPACITY CHART 1/4" SHIM MAX - (CONDITION 1 AND CONDITION 2)

		TYPE A NUMBER OF ANCHORS AT THE CLUSTER							TYPE B NUMBER OF ANCHORS AT THE CLUSTER				TYPE C NUMBER OF ANCHORS AT THE CLUSTER				
		ALLOWABLE PRESSURE (PSF) +/-							ALLOWABLE PRESSURE (PSF) +/-				ALLOWABLE PRESSURE (PSF) +/-				
WIDTH (W)	FRAME HEIGHT (in)	4	6	8	10	12	14	16	4	6	8	10	4	6	8	10	12
24	84	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
36		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
42		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
48		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
54		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
60		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
66		116	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
72		113	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
78		112	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
84		111	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
24	96	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
36		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
42		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
48		113	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
54		105	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
60		99	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
66		94	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
72		91	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
78		88	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
84		86	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
24	108	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
36		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
42		107	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
48		97	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
54		90	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
60		84	120	120	120	120	120	120	120	120	120	120	118	120	120	120	120
66		79	119	120	120	120	120	120	120	120	120	120	112	120	120	120	120
72		76	113	120	120	120	120	120	120	120	120	120	107	120	120	120	120
78		73	109	120	120	120	120	120	120	120	120	120	103	120	120	120	120
84		71	106	120	120	120	120	120	120	120	120	120	100	120	120	120	120
24	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
36		107	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
42		94	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
48		85	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
54		78	117	120	120	120	120	120	120	120	120	120	110	120	120	120	120
60		73	109	120	120	120	120	120	120	120	120	120	102	120	120	120	120
66		68	102	120	120	120	120	120	119	120	120	120	96	120	120	120	120
72		65	97	120	120	120	120	120	113	120	120	120	91	120	120	120	120
78		62	93	120	120	120	120	120	108	120	120	120	88	120	120	120	120
84		60	90	120	120	120	120	120	104	120	120	120	84	120	120	120	120
24	132	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30		112	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
36		95	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
42		84	120	120	120	120	120	120	120	120	120	120	119	120	120	120	120
48		76	113	120	120	120	120	120	120	120	120	120	107	120	120	120	120
54		69	104	120	120	120	120	120	120	120	120	120	98	120	120	120	120
60		64	96	120	120	120	120	120	112	120	120	120	90	120	120	120	120
66		60	90	120	120	120	120	120	105	120	120	120	85	120	120	120	120
72		57	85	113	120	120	120	120	99	120	120	120	80	120	120	120	120
78		54	81	108	120	120	120	120	94	120	120	120	76	114	120	120	120
84		52	78	104	120	120	120	120	90	120	120	120	73	110	120	120	120

ANCHORS AT JAMB AREA ANCHORS BETWEEN CLUSTERS ANCHORS AT INTERMEDIATE AREA



WIDTH (W) = $\frac{W1 + W2}{2}$
WIDTH (W) = W1 (AT FRAME JAMBS)

CONDITION 1 HEAD/SILL
WITH SUB BUCK (1/4" MAX SHIM)

CONDITION 2 HEAD/SILL
WITHOUT SUB BUCK (1/4" MAX SHIM)

Two cross-sectional diagrams of a window head and sill. The left diagram, 'CONDITION 1 HEAD/SILL WITH SUB BUCK (1/4" MAX SHIM)', shows a sub-buck and shim. The right diagram, 'CONDITION 2 HEAD/SILL WITHOUT SUB BUCK (1/4" MAX SHIM)', shows the assembly without the sub-buck.

FRANK BENARDO, PE
PE# 0046549 CA# 9885

ENGINEERING EXPRESS®
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

55

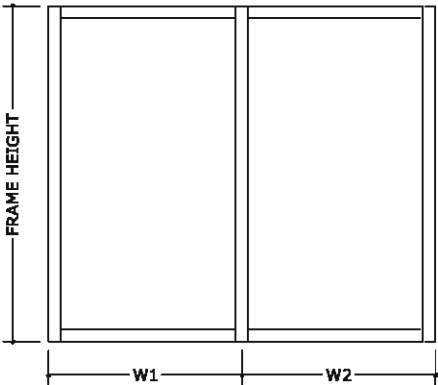
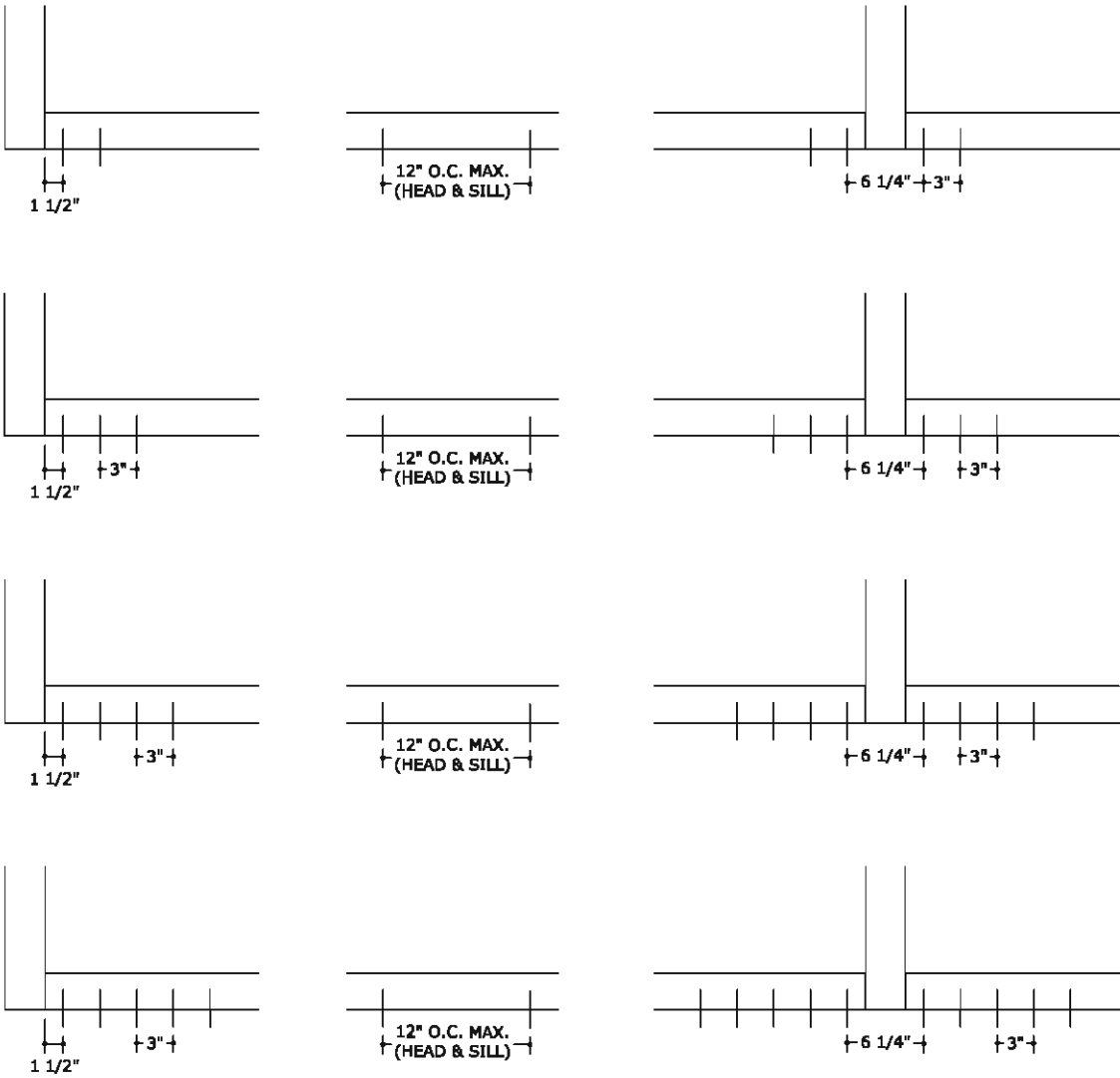
OF 64

C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:04pm Francisco

ANCHOR LOAD CAPACITY CHART 1/4" SHIM MAX - (CONDITION 1 AND CONDITION 2)

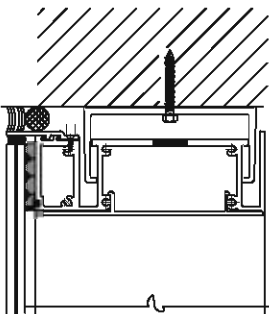
WIDTH (W)		FRAME HEIGHT (in)	TYPE A NUMBER OF ANCHORS AT THE CLUSTER						TYPE B NUMBER OF ANCHORS AT THE CLUSTER					TYPE C NUMBER OF ANCHORS AT THE CLUSTER				
			ALLOWABLE PRESSURE (PSF) +/-						ALLOWABLE PRESSURE (PSF) +/-					ALLOWABLE PRESSURE (PSF) +/-				
			4	6	8	10	12	14	16	4	6	8	10	4	6	8	10	12
24	144		120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30			101	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
36			86	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
42			76	114	120	120	120	120	120	120	120	120	120	107	120	120	120	120
48			68	102	120	120	120	120	120	119	120	120	120	96	120	120	120	120
54			62	93	120	120	120	120	120	108	120	120	120	88	120	120	120	120
60			57	86	115	120	120	120	120	100	120	120	120	81	120	120	120	120
66			53	80	107	120	120	120	120	93	120	120	120	75	113	120	120	120
72			50	76	101	120	120	120	120	88	120	120	120	71	107	120	120	120
78			48	72	96	120	120	120	120	83	120	120	120	68	101	120	120	120
84	156		46	69	91	114	120	120	120	80	120	120	120	65	97	120	120	120
24			113	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30			93	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
36			79	118	120	120	120	120	120	120	120	120	120	111	120	120	120	120
42			69	104	120	120	120	120	120	120	120	120	120	98	120	120	120	120
48			62	93	120	120	120	120	120	108	120	120	120	87	120	120	120	120
54			56	84	112	120	120	120	120	98	120	120	120	79	119	120	120	120
60			52	78	104	120	120	120	120	90	120	120	120	73	110	120	120	120
66			48	72	96	120	120	120	120	84	120	120	120	68	102	120	120	120
72			45	68	91	113	120	120	120	79	119	120	120	64	96	120	120	120
78	168		43	64	86	107	120	120	120	75	112	120	120	61	91	120	120	120
84			41	61	82	102	120	120	120	71	107	120	120	58	87	115	120	120
24			105	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30			85	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
36			73	109	120	120	120	120	120	120	120	120	120	102	120	120	120	120
42			63	95	120	120	120	120	120	111	120	120	120	90	120	120	120	120
48			57	85	113	120	120	120	120	99	120	120	120	80	120	120	120	120
54			51	77	103	120	120	120	120	90	120	120	120	73	109	120	120	120
60			47	71	95	118	120	120	120	83	120	120	120	67	100	120	120	120
66			44	66	88	110	120	120	120	77	115	120	120	62	93	120	120	120
72	180		41	62	82	103	120	120	120	72	108	120	120	58	87	116	120	120
78			39	58	78	97	117	120	120	68	102	120	120	55	82	110	120	120
84			37	56	74	93	111	120	120	65	97	120	120	52	78	104	120	120
24			97	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30			79	119	120	120	120	120	120	120	120	120	120	112	120	120	120	120
36			67	101	120	120	120	120	120	117	120	120	120	95	120	120	120	120
42			59	88	117	120	120	120	120	102	120	120	120	83	120	120	120	120
48			52	78	105	120	120	120	120	91	120	120	120	74	111	120	120	120
54			47	71	95	119	120	120	120	83	120	120	120	67	100	120	120	120
60			44	65	87	109	120	120	120	76	114	120	120	61	92	120	120	120
66	180		40	61	81	101	120	120	120	70	106	120	120	57	85	114	120	120
72			38	57	76	94	113	120	120	66	99	120	120	53	80	107	120	120
78			36	53	71	89	107	120	120	62	93	120	120	50	75	101	120	120
84			34	51	68	84	101	118	120	59	88	118	120	48	72	95	119	120

ANCHORS AT JAMB AREA ANCHORS BETWEEN CLUSTERS ANCHORS AT INTERMEDIATE AREA

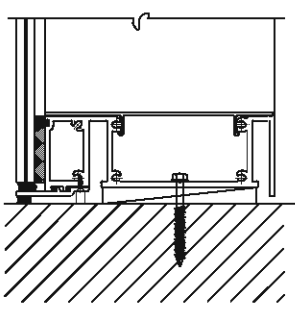


WIDTH (W) = $\frac{W1 + W2}{2}$
WIDTH (W) = W1 (AT FRAME JAMBS)

CONDITION 1 HEAD/SILL
WITH SUB BUCK (1/4" MAX SHIM)



CONDITION 2 HEAD/SILL
WITHOUT SUB BUCK (1/4" MAX SHIM)



FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

56 OF 64

C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - 8000 Series Aluminum Curtain Wall\WP2020-FBC\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020-FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:04pm Francisco

ANCHOR LOAD CAPACITY CHART 1/4" SHIM MAX - (CONDITION 1 AND CONDITION 2)

		TYPE A NUMBER OF ANCHORS AT THE CLUSTER						TYPE B NUMBER OF ANCHORS AT THE CLUSTER					TYPE C NUMBER OF ANCHORS AT THE CLUSTER				
		ALLOWABLE PRESSURE (PSF) +/-						ALLOWABLE PRESSURE (PSF) +/-					ALLOWABLE PRESSURE (PSF) +/-				
		4	6	8	10	12	14	16	4	6	8	10	4	6	8	10	12
WIDTH (W)	FRAME HEIGHT (in)	24	91	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30	192	74	111	120	120	120	120	120	120	120	120	120	104	120	120	120	120
36		63	94	120	120	120	120	120	109	120	120	120	88	120	120	120	120
42		55	82	109	120	120	120	120	95	120	120	120	77	115	120	120	120
48		49	73	97	120	120	120	120	85	120	120	120	69	103	120	120	120
54		44	66	88	110	120	120	120	77	115	120	120	62	93	120	120	120
60		40	60	81	101	120	120	120	70	105	120	120	57	85	114	120	120
66		37	56	75	93	112	120	120	65	98	120	120	53	79	105	120	120
72		35	52	70	87	105	120	120	61	91	120	120	49	74	98	120	120
78		33	49	66	82	98	115	120	57	86	114	120	46	69	93	116	120
84		31	47	62	78	93	109	120	54	81	108	120	44	66	88	110	120
24	204 3/8	85	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
30		69	103	120	120	120	120	120	120	120	120	120	97	120	120	120	120
36		58	88	117	120	120	120	120	102	120	120	120	82	120	120	120	120
42		51	76	102	120	120	120	120	89	120	120	120	72	108	120	120	120
48		45	68	90	113	120	120	120	79	118	120	120	64	96	120	120	120
54		41	61	82	102	120	120	120	71	107	120	120	58	87	115	120	120
60		37	56	75	94	112	120	120	65	98	120	120	53	79	106	120	120
66		35	52	69	87	104	120	120	60	91	120	120	49	73	98	120	120
72		32	48	65	81	97	113	120	56	85	113	120	46	68	91	114	120
78		30	46	61	76	91	106	120	53	79	106	120	43	64	86	107	120
84		29	43	57	72	86	101	115	50	75	100	120	41	61	81	101	120

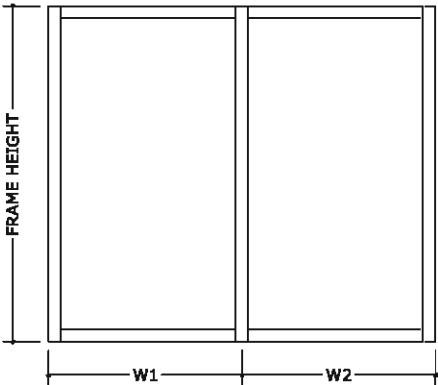
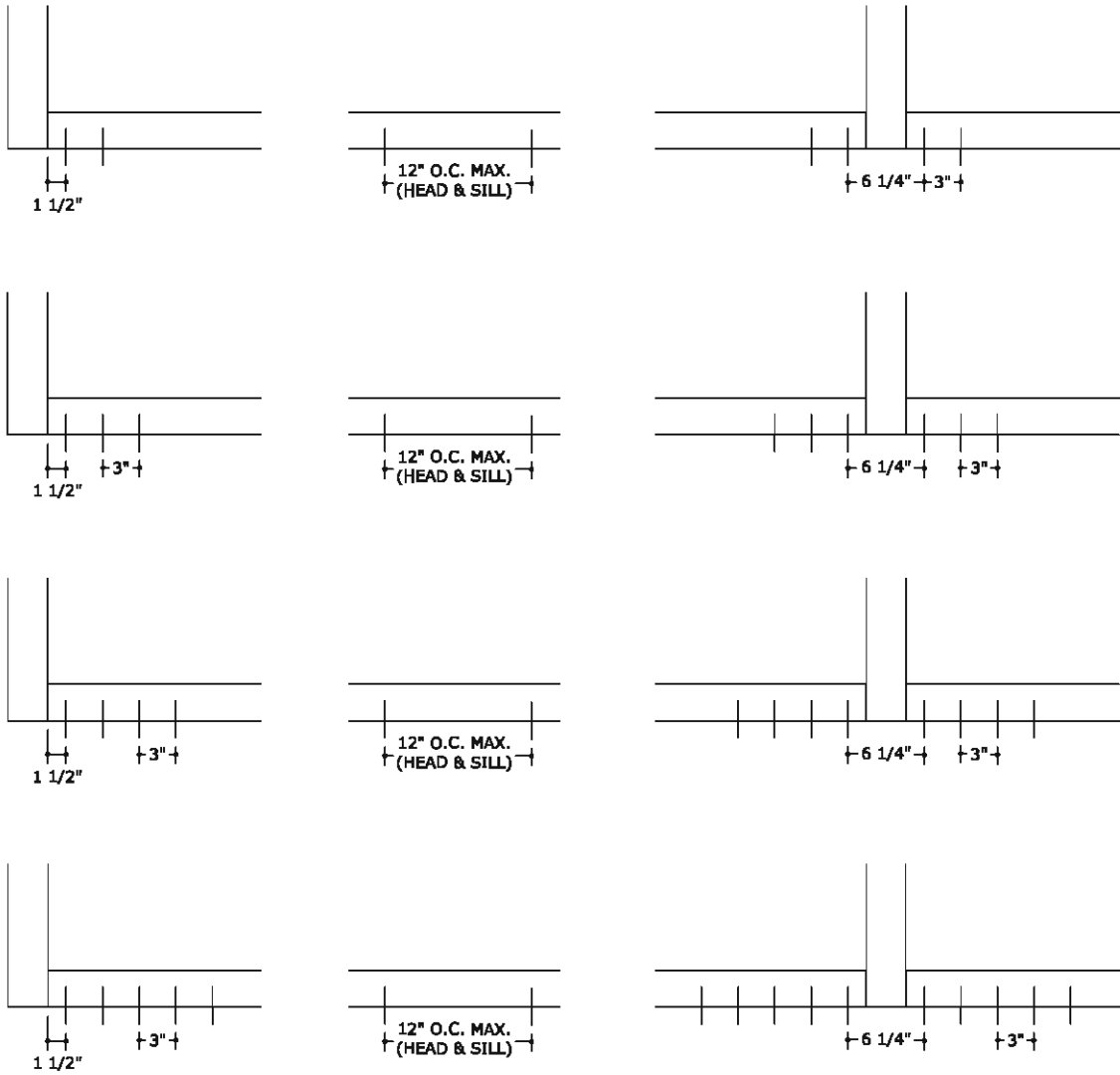
TYPICAL ANCHOR TYPES:

TYPE A - 5/16" DEWALT ULTRA CON OR EQUAL, 1 1/2" MIN ENGAGEMENT INTO SOUTHERN YELLOW PINE #2 WOOD (SG=0.55 MIN.) WITH 1-1/4" MIN EDGE DISTANCE

TYPE B - 5/16" DEWALT ULTRA CON OR EQUAL, 2" EFFECTIVE EMBEDMENT INTO 3000 PSI CONCRETE MIN. WITH 2 1/2" EDGE DISTANCE

TYPE C - 5/16" -24 DEWALT DRILLFLEX OR EQUAL, ENGAGING 5 PITCHES PASSED THE THREAD PLANE INTO 1/8" ALUMINUM (6063-T5 MIN) OR 1/8" STEEL (A36 MIN), 3/4" MIN EDGE DISTANCE

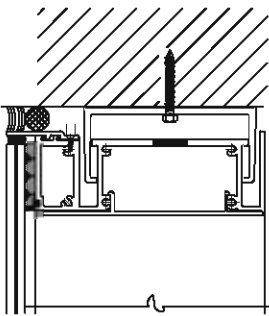
ANCHORS AT JAMB AREA ANCHORS BETWEEN CLUSTERS ANCHORS AT INTERMEDIATE AREA



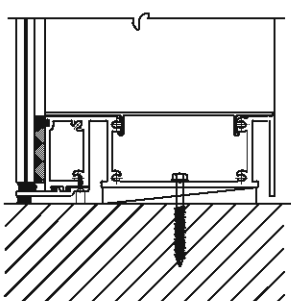
WIDTH (W) = $\frac{W1 + W2}{2}$

WIDTH (W) = W1 (AT FRAME JAMBS)

CONDITION 1 HEAD/SILL
WITH SUB BUCK (1/4" MAX SHIM)



CONDITION 2 HEAD/SILL
WITHOUT SUB BUCK (1/4" MAX SHIM)



FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS®

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020-FBC	CCB	AJP	10/13/20
			-
			-
			-

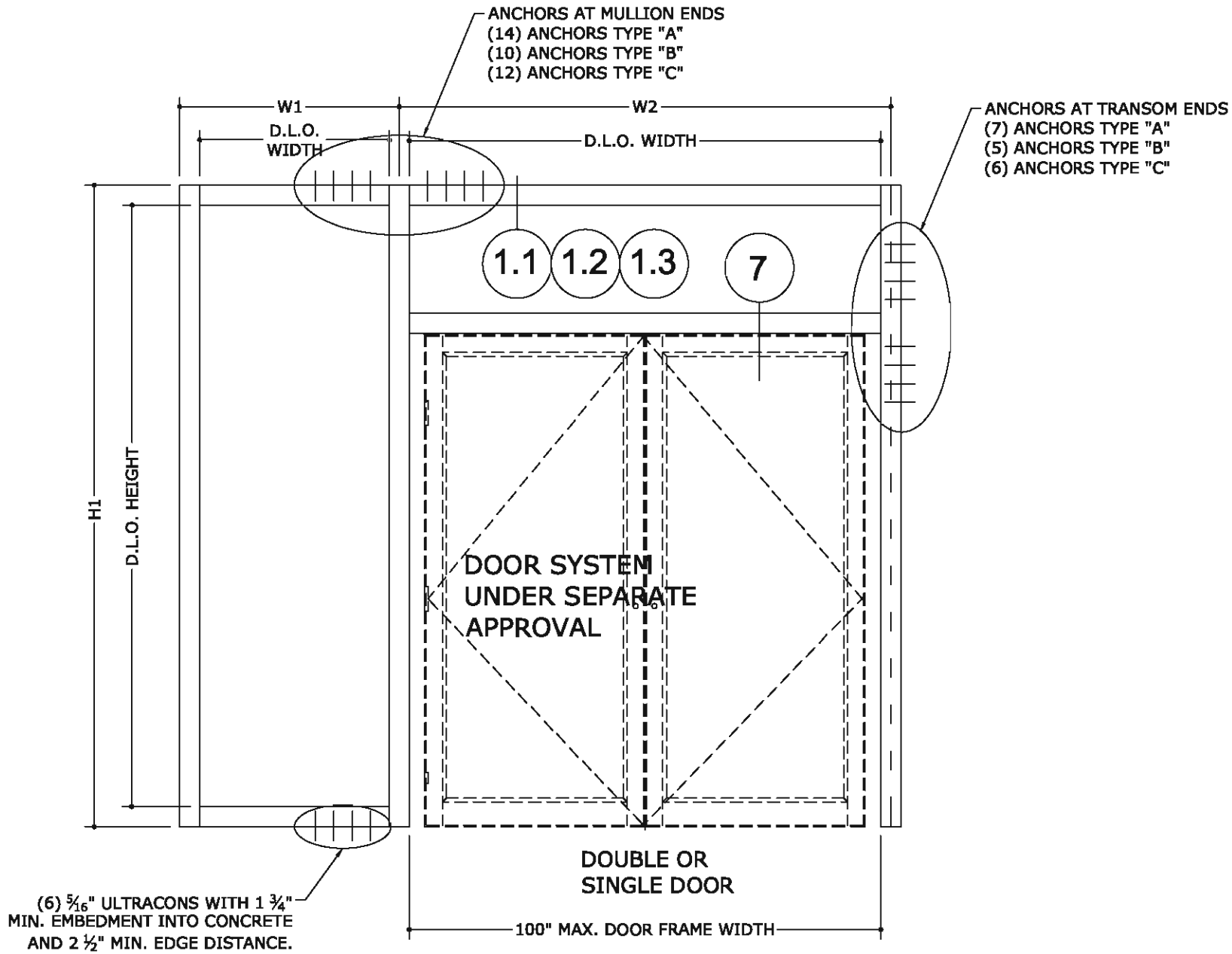
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

C:\Users\Francisco\Engineering\ExpressProduction - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:04pm Francisco



TYPICAL ANCHOR TYPES:

TYPE A - 5/16" DEWALT ULTRA CON OR EQUAL, 1 1/2" MIN ENGAGEMENT INTO SOUTHERN YELLOW PINE #2 WOOD (SG=0.55 MIN.) WITH 1-1/4" MIN EDGE DISTANCE

TYPE B - 5/16" DEWALT ULTRA CON OR EQUAL, 2" EFFECTIVE EMBEDMENT INTO 3000 PSI CONCRETE MIN. WITH 2 1/2" EDGE DISTANCE

TYPE C - 5/16" -24 DEWALT DRILLFLEX OR EQUAL, ENGAGING 5 PITCHES PASSED THE THREAD PLANE INTO 1/8" ALUMINUM (6063-T5 MIN) OR 1/8" STEEL (A36 MIN), 3/4" MIN EDGE DISTANCE

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

PARTS LIST



ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

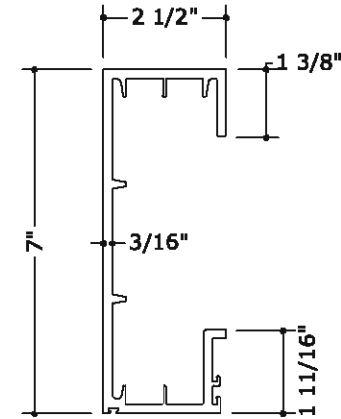
SCALE: NTS UNLESS NOTED

59 OF 64

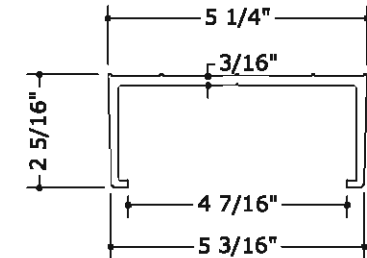
59

10/14/2020 - 12:04pm Francisco

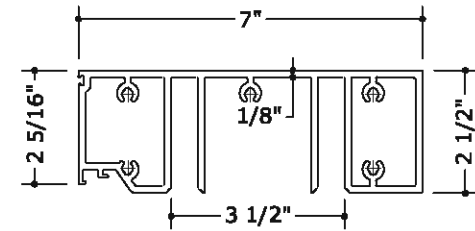
C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg



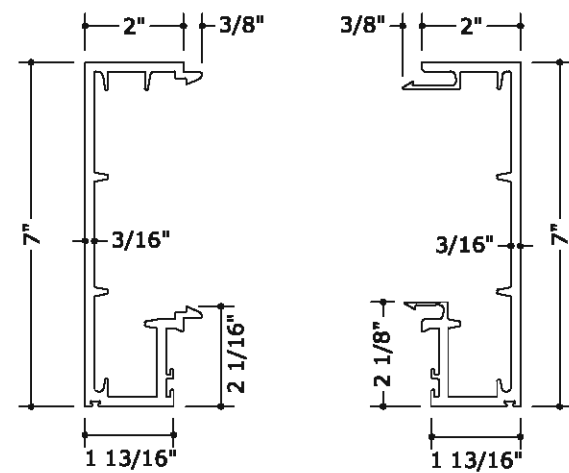
8000 JAMB



8007 HEAD RECEPTOR

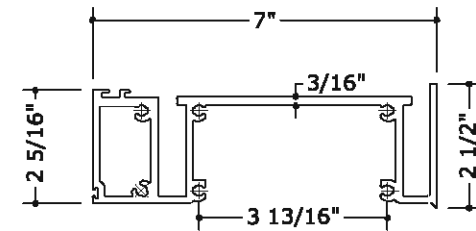


8011 HORIZONTAL @ SPLICE (FEMALE)

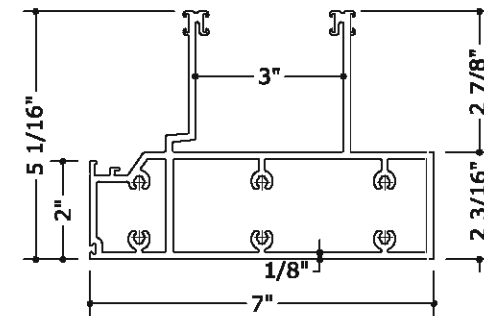


8001 VERT. MULLION (MALE)

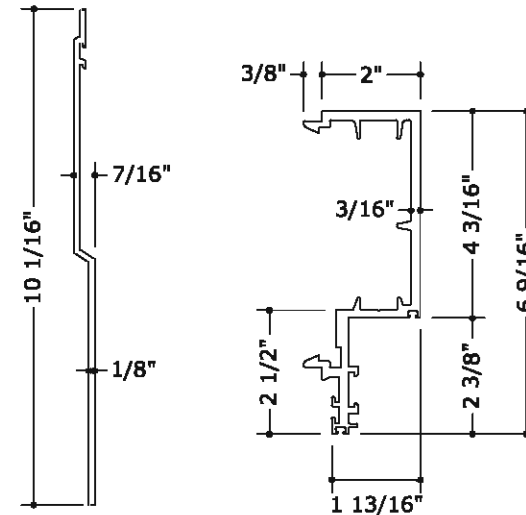
8002 VERT. MULLION (FEMALE)



8008 HEAD / SILL

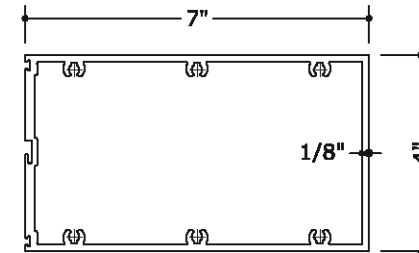


8012 HORIZONTAL @ SPLICE (MALE)

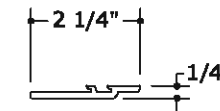


8018 LOUVER ADAPTOR

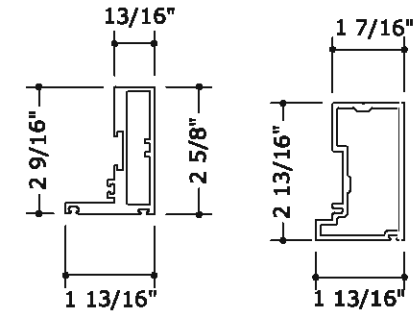
8004 FEMALE MULLION FOR CASEMENT



8009 INTERMEDIATE HORIZONTAL

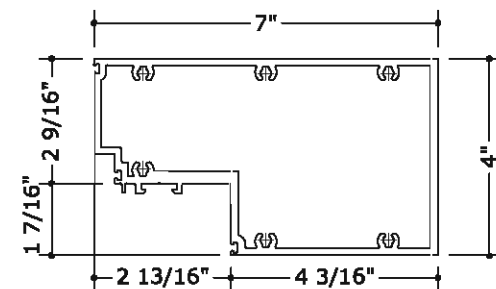


8019 VERTICAL GLASS SUPPORT



8005 CASEMENT / PROJECTED FRAME

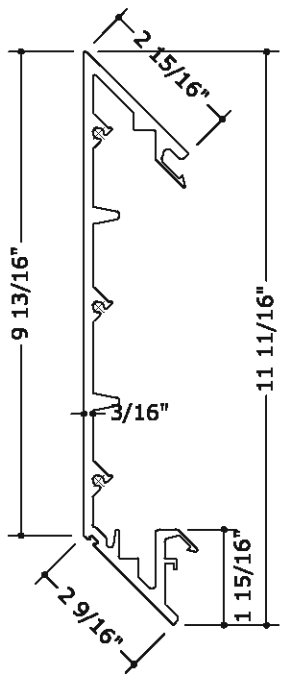
8006 MULLION FILLER



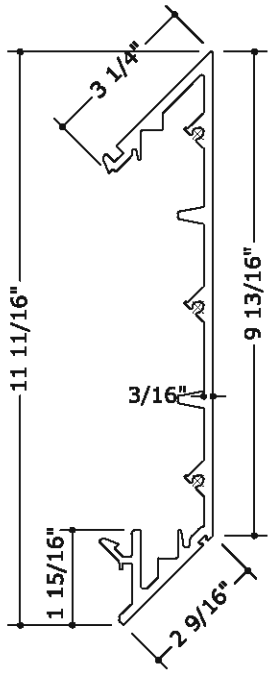
8003 INTERMEDIATE HORIZONTAL @ CASEMENT HEAD / SILL

ALUMINUM 6005-T5

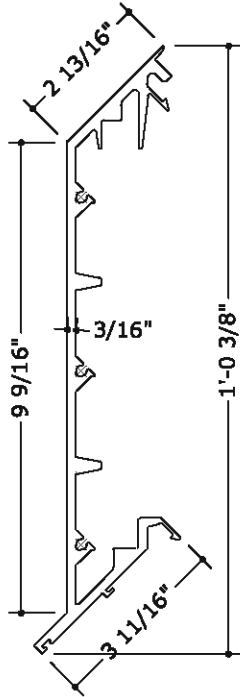
PARTS LIST



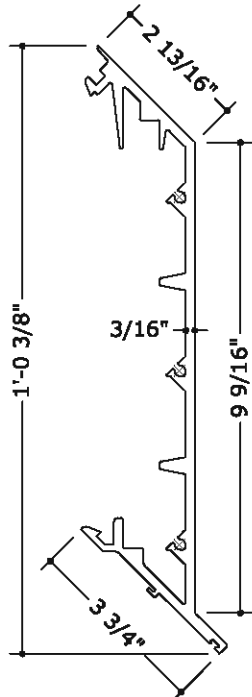
8014 OUTSIDE CORNER MULLION (FEMALE)



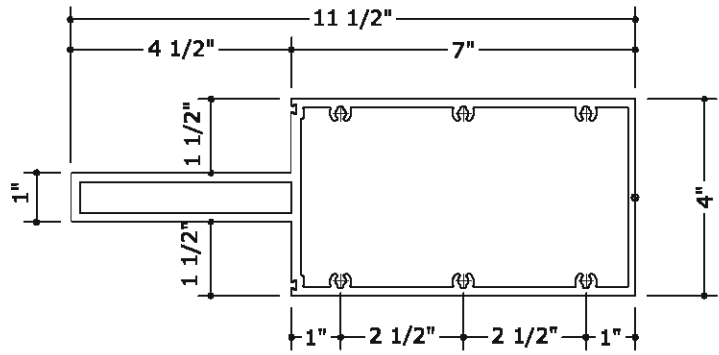
8015 OUTSIDE CORNER MULLION (MALE)



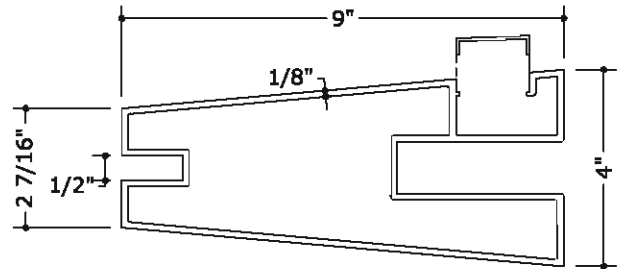
8016 INSIDE CORNER MULLION (FEMALE)



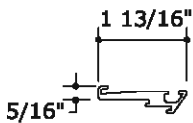
8017 INSIDE CORNER MULLION (MALE)



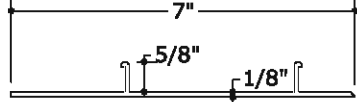
8010 INT. HORIZ. FOR SUNSHADE



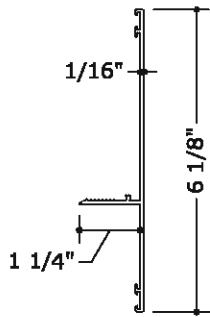
8024 SUNSHADE



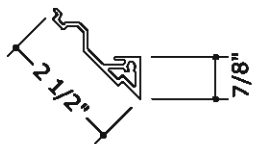
8020 GLASS SUPPORT



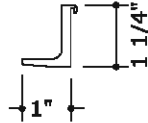
8013 HEAD / SILL MULLION COVER



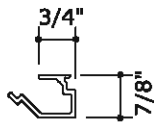
8023 SPLICE MULLION COVER



8043 OUTSIDE CORNER END CAP



8021 HORIZONTAL GLASS SUPPORT



8044 INSIDE CORNER END CAP

ALUMINUM 6005-T5

FRANK BENARDO, PE
PE# 0046549 CA# 9885



ENGINEERING EXPRESS®
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.

CORAL SPRINGS, FL 33065

(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

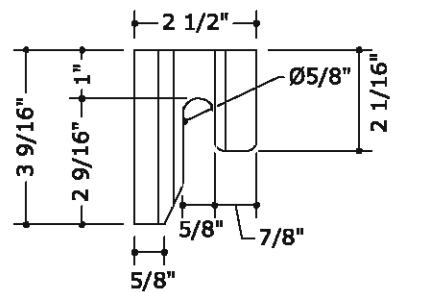
20-29341

SCALE: NTS UNLESS NOTED

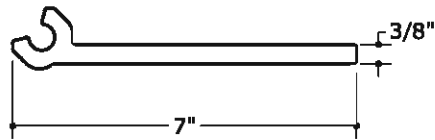
60

OF 64

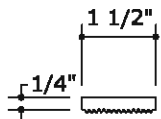
PARTS LIST



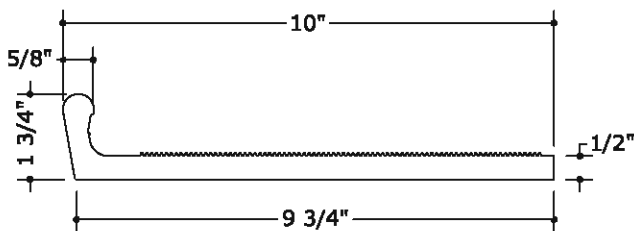
8025 HOOK BRACKET



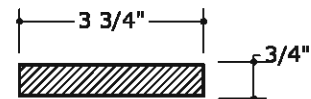
8042 HOOK SUPPORT BRACKET (INSIDE CORNER)



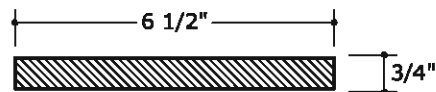
8028 SERRATED WASHER



8026 BASE BRACKET



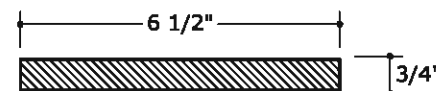
8045 ALUMINUM REINFORCEMENT BAR



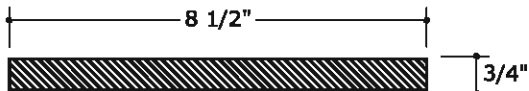
8046 ALUMINUM REINFORCEMENT BAR



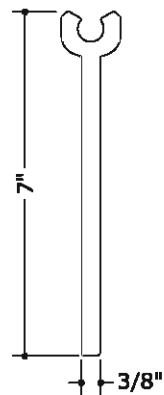
8047 STEEL REINFORCEMENT BAR



8033 STEEL REINFORCEMENT BAR



8034 ALUMINUM REINFORCEMENT BAR



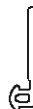
8041 HOOK SUPPORT BRACKET (7 1/8" LONG)



G-20 GLASS SUPPORT GASKET



G-25 STACK JOIN GASKET FOR CHICKEN HEAD



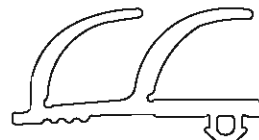
G-22 EXTERIOR WINDOW GASKET



G-21 PERIMETER GASKET FOR WINDOW



G-24 MIDDLEMOST GASKET FOR WINDOW



G-23 STACK JOINT GASKET FOR LAMINATED GLASS 9 / 16 "

FRANK BENARDO, PE
PE# 0046549 CA# 9885



CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS

3776 NW 124TH AVE.

CORAL SPRINGS, FL 33065

(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

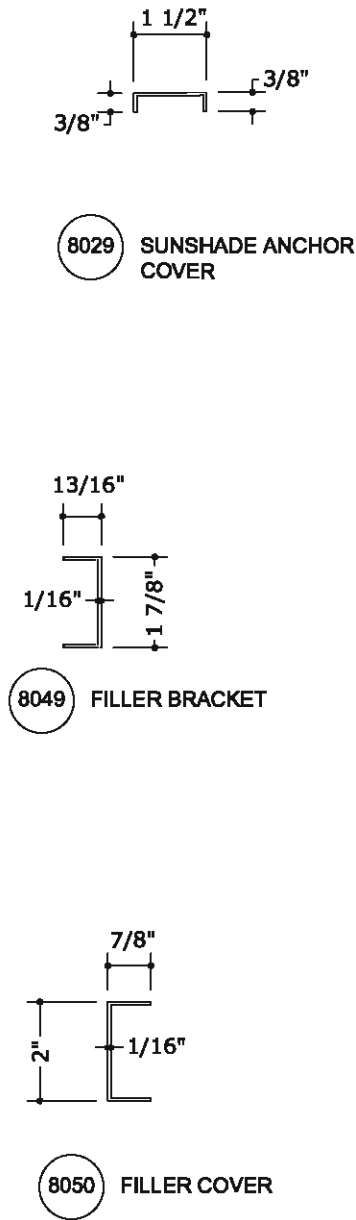
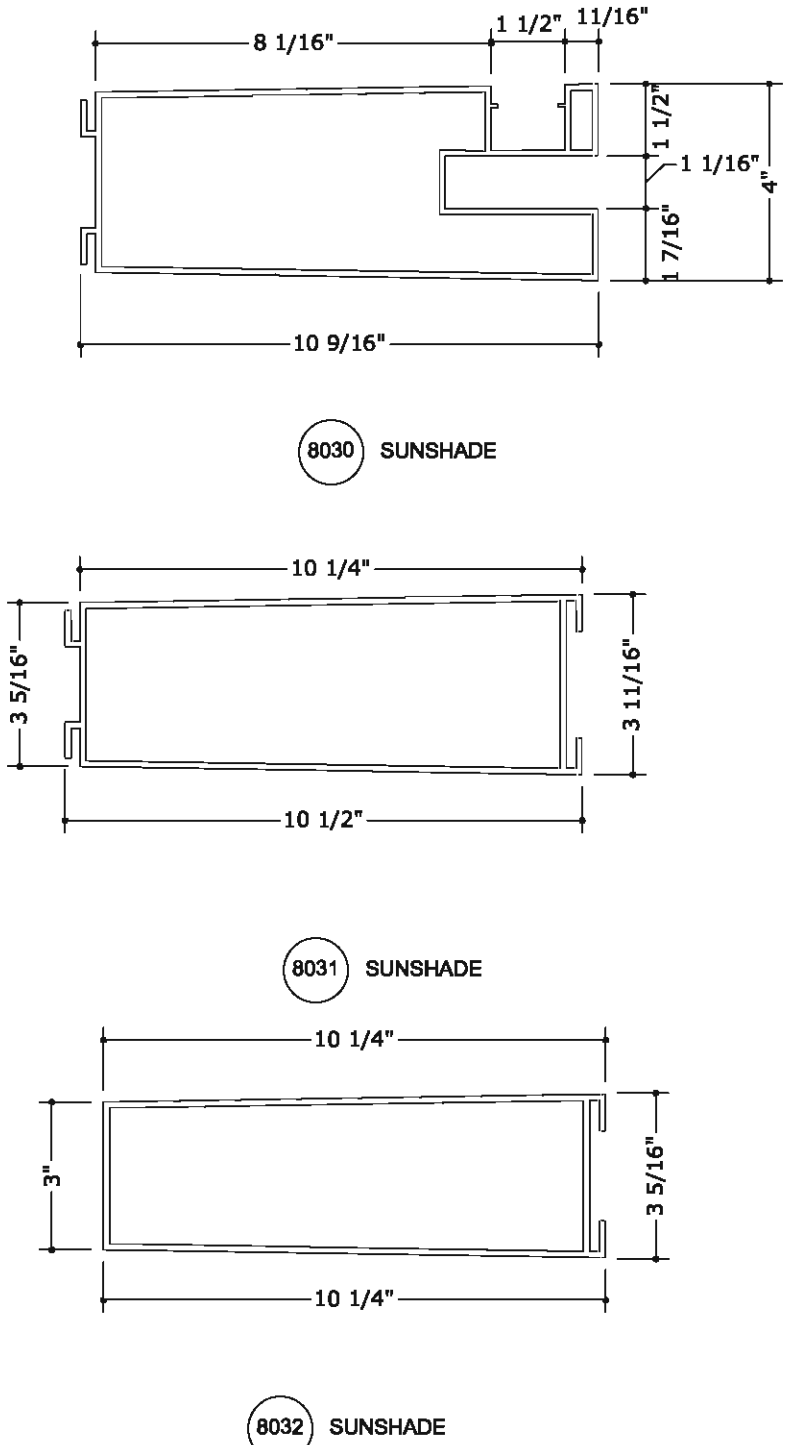
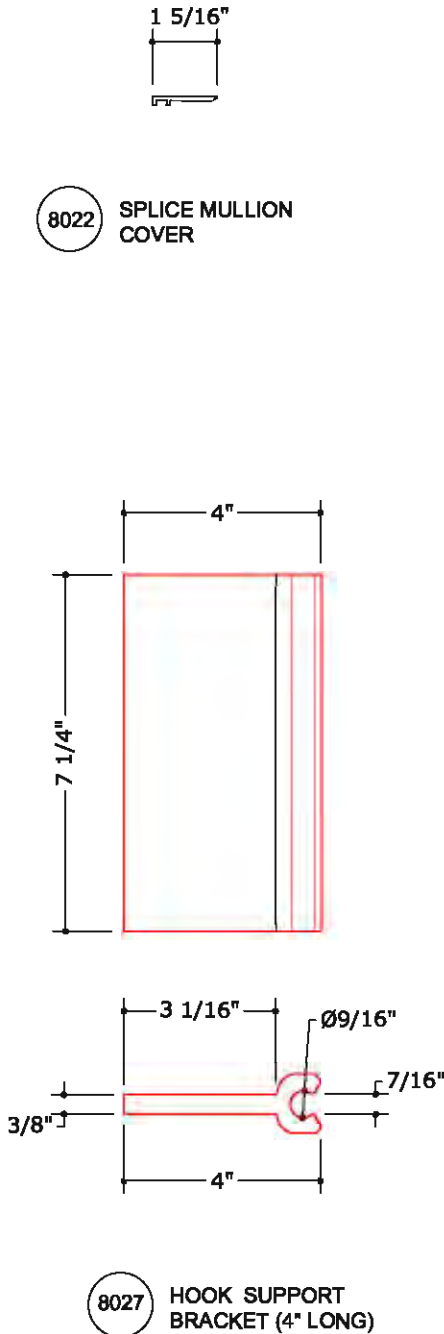
61

OF 64

ALUMINUM 6005-T5

C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP\2020 FBC\20-29341 - FL22982.5 - DWG5.dwg 10/14/2020 - 12:05pm Francisco

ALUMINUM 6005-T5



FRANK BENARDO, PE
PE# 0046549 CA# 9885

10/15/2020

ENGINEERING EXPRESS

CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

62 OF 64

C:\Users\Francisco\Engineering Express\Production - Documents\Projects\20-29341 - FL22982.5 - 8000 Series Aluminum Curtain Wall\WP2020 FBC\20-29341 - FL22982.5 - DWG5.dwg
Francisco
10/14/2020 - 12:05pm

BILL OF MATERIALS				
PART No.	DESCRIPTION	MATERIAL	REMARKS	MANUFACTURER
8000	JAMB	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8001	VERT. MULLION (MALE)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8002	VERT. MULLION (FEMALE)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8003	INTERMEDIATE HORIZONTAL ☉ CASEMENT HEAD / SILL	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8004	MULLION FOR CASEMENT	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8005	CASEMENT / PROJECTED FRAME	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8006	MULLION FILLER	ALUM. AL. 6005-T5	FRAME	UNITEO GLASS
8007	HEAD RECEPTOR	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8008	HEAD / SILL	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8009	INTERMEDIATE HORIZONTAL	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8010	INTERMEDIATE ☉ SUNSHADE	ALUM. AL. 6005-T5	FRAME	UNITEO GLASS
8011	HORIZONTAL ☉ SPLICE (FEMALE)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8012	HORIZONTAL ☉ SPLICE (MALE)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8013	HEAD / SILL MULLION COVER	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8014	OUTSIDE CORNER MULLION (FEMALE)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8015	OUTSIDE CORNER MULLION (MALE)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8016	INSIDE CORNER MULLION (FEMALE)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8017	INSIDE CORNER MULLION (MALE)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8018	LOUVER ADAPTOR	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8019	VERTICAL GLASS SUPPORT	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8020	GLASS SUPPORT	ALUM. AL. 6005-T5	FRAME	UNITEO GLASS
8021	HORIZONTAL GLASS SUPPORT	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8022	SPLICE MULLION COVER	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8023	SPLICE MULLION COVER	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8024	SUNSHADE	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8025	HOOK BRACKET	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8026	BASE BRACKET	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8027	HOOK SUPPORT BRACKET (7 1/4" LONG)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8028	SERRATED WASHER	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8029	SUNSHADE ANCHOR COVER	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8030	SUNSHADE ASSEMBLY EXTRUSION	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8031	SUNSHADE ASSEMBLY EXTRUSION	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8032	SUNSHADE PROFILE	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8033	STEEL REINFORCEMENT BAR 6 1/2"x 3/4"	STEEL (A-36 MIN.)	FRAME	UNITED GLASS
8034	ALUMINUM REINFORCEMENT BAR 8 1/2"x 3/4"	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8041	HOOK SUPPORT BRACKET (7 1/16" LONG)	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8042	HOOK SUPPORT BRACKET (INSIDE CORNER) 7"	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8043	OUTSIDE CORNER END CAP	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8044	INSIDE CORNER END CAP	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8045	ALUMINUM REINFORCEMENT BAR 3 3/4"x 3/4"	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8046	ALUMINUM REINFORCEMENT BAR 6 1/2"x 3/4"	ALUM. AL. 6005-T5	FRAME	UNITED GLASS
8047	STEEL REINFORCEMENT BAR 3 3/4"x 3/4"	STEEL (A-36 MIN.)	FRAME	UNITED GLASS
8049	FILLER BRACKET	ALUM. AL.	FRAME	UNITED GLASS
8050	FILLER COVER	ALUM. AL.	FRAME	UNITED GLASS
8051	#12-14x3/4" DRILL PLEX SELF ORILLING #3 PHILIPS UNDERCUT FLAT HEAD		FRAME	
8052	#12-14x1" DRILL FLEX SELF DRILLING #3 PHILIPS UNDERCUT FLAT HEAD			
8053	1/4"-14x1 1/2" DRILL FLEX STRUCTURAL SELF DRILLING SCREWS 3/8" FLEX WASTER HEAO		FRAME	
8054	1/4"-14x3/4" ORILL FLEX STRUCTURAL SELF DRILLING SCREWS 3/8" FLEX WASTER HEAD			
8055	#10x3/4" SCREWS FLAT HEAD			
212637	ALU STRIKER V .01 WK2		FRAME	ROTO
326815	FRICTION HINGE ADJUSTMENT DEVICE		FRAME	ROTO
334665	ALU CONNECTING ROD 6M (3PCS= 1)		FRAME	ROTO
334671	ALU INSERTABLE CAM		FRAME	ROTO
377474	ALU RL GEARED HANDLE W/ LOGO SILVER		FRAME	ROTO
377475	ALU RL GEARED HANDLE W/ LOGO BLACK		FRAME	ROTO
377477	ALU RL GEARED HANDLE W/LOGO WHITE		FRAME	ROTO

BILL OF MATERIALS				
PART No.	DESCRIPTION	MATERIAL	REMARKS	MANUFACTURER
428264	ALU TH CONNECTOR		FRAME	ROTO
428309	ALU GEARED HANDLE FORK 02		FRAME	ROTO
447245	ALU-V INSERTABLE SECURITY CAM		FRAME	ROTO
728844	AL CORNER DRIVE W/O MD		FRAME	ROTO
728918	ALU STRIKER V .01		FRAME	ROTO
477271	STERLING 4-BAR TH/FR HINGE22-1/567		FRAME	ROTO
485771	FRH HB SS SH 16" STK 16-19		FRAME	ROTO
486367	ALU CENTER CLOSER BP		FRAME	ROTO
G-20	GLASS SUPPORT GASKET	P.V.C	FRAME	UNITED GLASS
G-21	PERIMETER GASKET FOR WINDOW	E.P.D.M.	FRAME	UNITED GLASS
G-22	EXTERIOR WINDOW GASKET	E.P.D.M.	FRAME	UNITED GLASS
G-23	STACK JOIN GASKET FOR LAMINATED GLASS 9/16"	E.P.D.M.	FRAME	UNITED GLASS
G-24	MIDDLEMOST GASKET FOR WINDOW	E.P.D.M.	FRAME	UNITED GLASS
G-25	STACK JOIN GASKET FOR CHICKEN HEAD	E.P.D.M.	FRAME	UNITED GLASS
R7437	KEY FOR DETACHABLE RESTRICTIR STAY		FRAME	ROTO
SDR6	6" DETACHABLE FRICTION RESTRICTOR STAY		FRAME	ROTO

FRANK BENARDO, PE
PE# 0046549 CA# 9885





CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 395-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE				
INIT ISSUE 2020 FBC	JEM	AJP	06/21/19				
	CCB	AJP	10/13/20				
THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.							

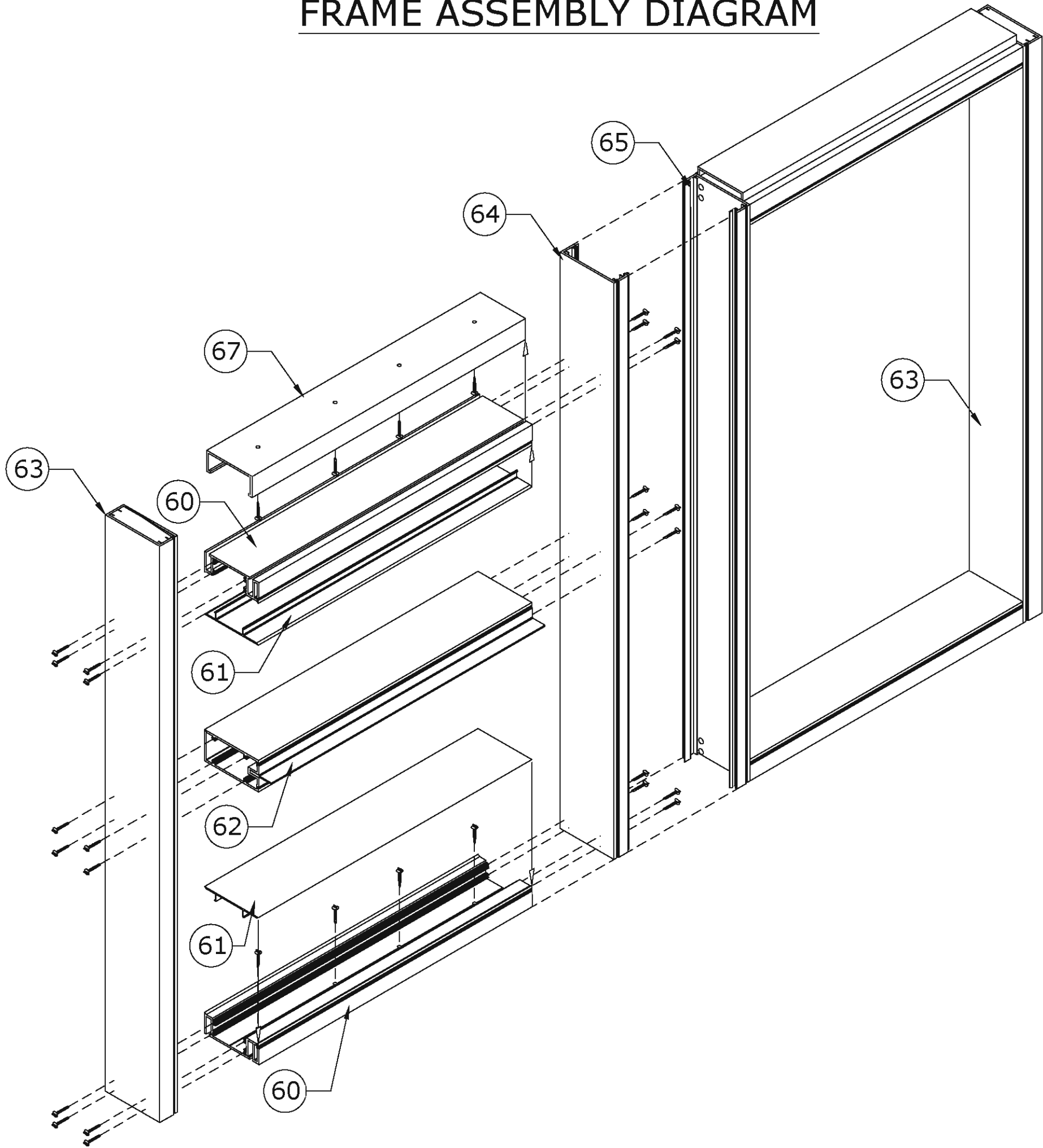
COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

63 OF 64

FRAME ASSEMBLY DIAGRAM



FRANK BENARDO, PE
PE# 0046549 CA# 9885

FRANK L. BENARDO
LICENSE
10/15/2019

ENGINEERING EXPRESS
CORPORATE OFFICE:
160 SW 12th AVE, SUITE 106
DEERFIELD BEACH, FL 33442
(954) 354-0660 | (866) 396-9999
TEAM@ENGINEERINGEXPRESS.COM
ENGINEERINGEXPRESS.COM

UNITED GLASS SYSTEMS
3776 NW 124TH AVE.
CORAL SPRINGS, FL 33065
(754) 227-5287

8000 SERIES ALUMINUM CURTAIN WALL
FLORIDA STATE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	JEM	AJP	06/21/19
2020 FBC	CCB	AJP	10/13/20
			-
			-
			-

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERING EXPRESS. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

COPYRIGHT ENGINEERING EXPRESS®

20-29341

SCALE: NTS UNLESS NOTED

64 OF 64