SHEET INDEX			
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03	TYPICAL ELEVATION	16	SECTION DETAILS
04	TYPICAL ELEVATION	17	SECTION DETAILS
05	TYPICAL ELEVATION	18	SECTION DETAILS
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07	PRESSURE CHART	20	ANCHOR DETAILS
08	PRESSURE CHART	21	PROFILES
09	SECTION DETAILS	22	PROFILES
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11	SECTION DETAILS	24	BILL OF MATERIALS
12	SECTION DETAILS	25	BILL OF MATERIALS
13	SECTION DETAILS		

TO OBTAIN AUTOCAD/REVIT COMPATIBLE DETAILS OF THIS PRODUCT, KINDLY GET IN TOUCH WITH US CONTACTING US VIA OUR OFFICIAL EMAIL ADDRESS: CONTACT@JA-PE.COM.

ES-SGD 1515T

(LARGE & SMALL MISSILE IMPACT)

GENERAL NOTES

1. THIS SYSTEM PRESENTED HEREIN HAS UNDERGONE DESIGN AND TESTING IN FULL COMPLIANCE WITH THE FLORIDA BUILDING CODE EIGHTH EDITION (2023) AND IS INTENDED FOR USE IN HIGH VELOCITY HURRICANE ZONE PER TAS 201/202/203.

2. THE DESIGN PRESSURES OUTLINED IN THIS DOCUMENT ARE DERIVED FROM MAXIMUM TESTED PRESSURES AND INCORPORATE A 1.5 SAFETY FACTOR.

3. THE PRESSURES PROVIDED IN THIS CERTIFICATION ARE DETERMINED USING THE ALLOWABLE STRESS DESIGN METHOD (ASD).

4. THIS PRODUCT HAS BEEN RIGOROUSLY TESTED IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN NOTE 1 OF THE GENERAL NOTES. IT IS CONFIRMED TO BE RESISTANT TO LARGE MISSILE IMPACT, THEREBY NOT NECESSITATING THE USE OF IMPACT-RESISTANT SHUTTERS.

5. THE DESIGN OF THIS SYSTEM DOES NOT INCORPORATE A 33-1/3% INCREASE IN ALLOWABLE STRESS. FOR WOOD ANCHOR DESIGN, A WIND LOAD DURATION FACTOR OF CD=1.6 HAS BEEN EMPLOYED.

6. THE ARCHITECT/ENGINEER OF RECORD RESPONSIBLE FOR THE PROJECT'S SUPERSTRUCTURE, WITH WHICH THIS DESIGN IS ASSOCIATED, SHALL ENSURE THE INTEGRITY OF ALL SUPPORTING SURFACES. COORDINATION WITH THE PERMITTING CONTRACTOR IS REQUIRED, AND PROPER ANCHORING OF WOOD BUCKS (BY OTHERS) MUST FACILITATE LOAD TRANSFER TO THE EXISTING STRUCTURE.

7. THE DETAILS OF THE SYSTEM PROVIDED HEREIN ARE OF A GENERIC NATURE AND DO NOT OFFER SPECIFIC SITE INFORMATION. FOR SITE CONDITIONS THAT DIFFER FROM THOSE SPECIFIED HERE, A LICENSED ENGINEER OR REGISTERED ARCHITECT MUST PREPARE SITE-SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS CERTIFICATION.

8. THE CONTRACTOR IS ACCOUNTABLE FOR INSULATING ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS (E.G., STEEL WITH ALUMINUM).

9. THE SUBSTITUTION OF FASTENERS DESCRIBED IN THIS CERTIFICATION IS PERMISSIBLE, PROVIDED THE ALTERNATIVE ANCHOR EXHIBITS STRENGTH EQUAL TO OR GREATER THAN THE ORIGINALLY SPECIFIED FINAL APPROVAL OF SUBSTITUTED ANCHORS SHALL BE GRANTED BY RELEVANT AUTHORITIES.

10. THE WOOD SCREWS REFERENCED IN THIS CERTIFICATION MUST MEET A MINIMUM GRADE OF 2 (FU = 74,000 PSI).

11. THE ENGINEER'S SEAL AFFIXED HERE VALIDATES THE STRUCTURAL DESIGN AS PRESENTED SOLELY. ANY USE OF THIS SPECIFICATION BY THE CONTRACTOR OR OTHERS INDEMNIFIES AND SAVES THE ENGINEER HARMLESS FROM ALL COSTS AND DAMAGES, INCLUDING LEGAL FEES AND APPELLATE FEES ARISING FROM MATERIAL FABRICATION, SYSTEM ERECTION, AND CONSTRUCTION PRACTICES BEYOND THE SCOPE CALLED FOR BY LOCAL, STATE, AND FEDERAL CODES OR DEVIATIONS FROM THE PLAN.

12. NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED BEYOND WHAT IS EXPRESSLY PROVIDED IN THIS DOCUMENT.

13. ALTERATIONS, ADDITIONS, OR ANY MARKINGS TO THIS DOCUMENT ARE STRICTLY PROHIBITED AND WILL INVALIDATE THIS CERTIFICATION.

14. PROPER SAFETY MEASURES MUST BE OBSERVED DURING THE INSTALLATION AND USE OF THIS SYSTEM, EVEN THOUGH THEY ARE NOT EXPLICITLY LISTED IN THIS CERTIFICATION.

15. EACH PRODUCT SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER SYSTEM, CONTAINING THE FOLLOWING REQUIRED INFORMATION:

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL 33142
TEL. (305) 638-5151
FAX. (305) 638-5158

FL# 47930.2

JAVAD AHMAD PE, inc
7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com
CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

ES-SGD 1515T
(L.M.I & S.M.I)

CLIENT :

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REVISION

No.	DATE	BY	DESCRIPTION
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date:	6/17/2026
scale:	N/A
drawn by:	M.S.
check by:	
Drawing no.	JA-1445-26

Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 – C.A.N. 34254



SEALED: 06-17-2026

COVER PAGE

SHEET No.
01 OF 25

GENERAL NOTES:

A. APPROVAL APPLIES TO STAND ALONE DOOR UNITS OR IN COMBINATION WITH APPROVED SIDELITES OR SIDE BY SIDE COMBINATIONS WITH OTHER F.B.C APPR'D WINDOWS / DOOR USING F.B.C. APPROVED MULLIONS IN BETWEEN.

B. LOWER DESIGN PRESSURE FROM DOORS / SIDELITES WILL APPLY TO ENTIRE SYSTEM.

C. THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2023 (8TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

D. 1BY OR 2BY WOOD BUCKS & BUCKS FASTENERS BY OTHER,MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

E. ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

F. A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

G. ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

H. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

I. THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.

J. CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

K. DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)' FOR EQUIVALENT LOADS IN 'LOAD AND RESISTANCE FACTOR DESIGN (LRFD)' MULTIPLY 'ASD' LOADS BY 1.67 (ASD LOAD X 1.67 = LRFD LOAD)

L. MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE LABELING TO COMPLY WITH SECTION 1709.9.2.

INSTRUCTIONS:

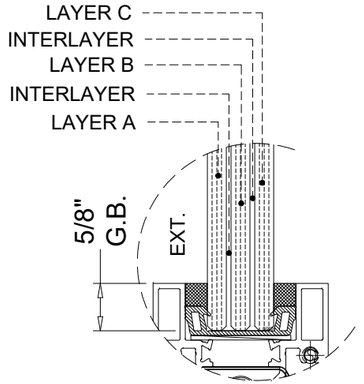
STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.

STEP 2: SEE GLASS SPECIFICATIONS ON SHEET 2.

STEP 3: CHECK SLIDING GLASS DOOR INTERLOCK & ASTRAGAL CAPACITY FOR GIVEN WIDTHS AND HEIGHTS USING CHARTS ON SHEETS 3B.

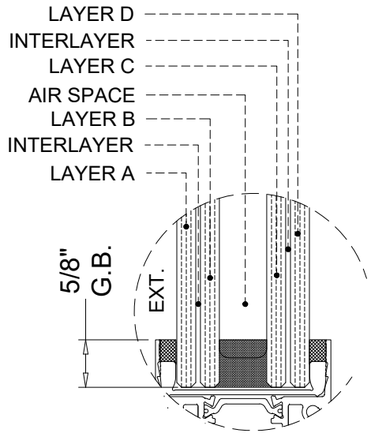
STEP 4: CHECK ANCHOR CAPACITY FOR SLIDING GLASS DOOR SYSTEMS USING CHARTS ON SHEETS 07 OR 08.

STEP 5: THE LOWEST VALUE RESULTING FROM STEPS 3 AND 4 SHALL APPLY TO THE ENTIRE SYSTEM.



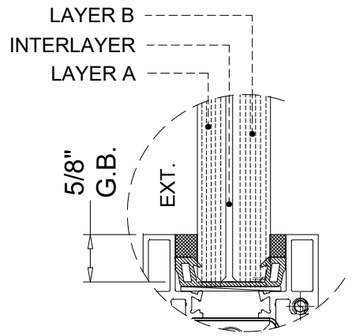
GLASS TYPE 'G1-SGD'

7/8" OVERALL
LAMINATED GLASS



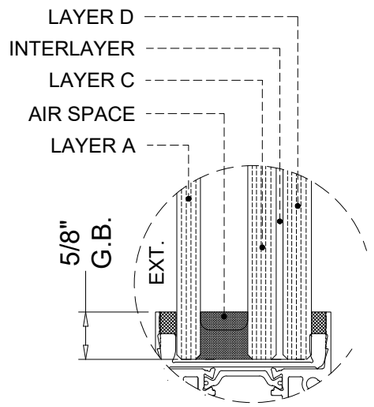
GLASS TYPE 'G2-SGD'

1-3/4" OVERALL INSULATED
LAMINATED GLASS



GLASS TYPE 'G3-SGD'

7/8" OVERALL
LAMINATED GLASS



GLASS TYPE 'G4-SGD'

1-3/4" OVERALL INSULATED
LAMINATED GLASS

COMPOSITION OF GLASS							
GLASS TYP.	EXT. SEALANT	LAYER A	INTERLAYER	LAYER B	INTERLAYER	LAYER C	INT. SEALANT
G1	SILICONE DS-983	1/4" HEAT STREND GLASS	0.090"SENTRY GLASS BY `KURARAY AMERICA, INC.'	1/4" HEAT STREND GLASS	0.090" INTERLAYER SGP CLEAR BY `KURARAY AMERICA, INC.'	1/4" HEAT STREND GLASS	SILICONE DS-983
G3	SILICONE DS-983	3/8" HEAT STREND GLASS	0.090"SENTRY GLASS BY `KURARAY AMERICA, INC.'	1/2" TEMP. GLASS	-	-	SILICONE DS-983

GLASS TYP.	EXT. SEALANT	LAYER A	INTERLAYER	LAYER B	AIR SPACE	LAYER C	INTERLAYER	LAYER D	INT. SEALANT
G2	SILICONE DS-983	1/4" HEAT STREND GLASS	0.090"SENTRY GLASS BY `KURARAY AMERICA, INC.'	1/4" HEAT STREND GLASS	5/8" AIR SPACER	1/4" HEAT STREND GLASS	0.090"SENTRY GLASS BY `KURARAY AMERICA, INC.'	1/4" HEAT STREND GLASS	STRUCTURAL SILICONE DS 983
G4	SILICONE DS-983	5/16" TEMP. GLASS	-	-	5/8" AIR SPACER	3/8" HEAT STREND GLASS	0.090"SENTRY GLASS BY `KURARAY AMERICA, INC.'	3/8" HEAT STREND GLASS	STRUCTURAL SILICONE DS 983

FL# 47930.2

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Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com
CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

ES-SGD 1515T
(L.M.I & S.M.I)

CLIENT :

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REVISION

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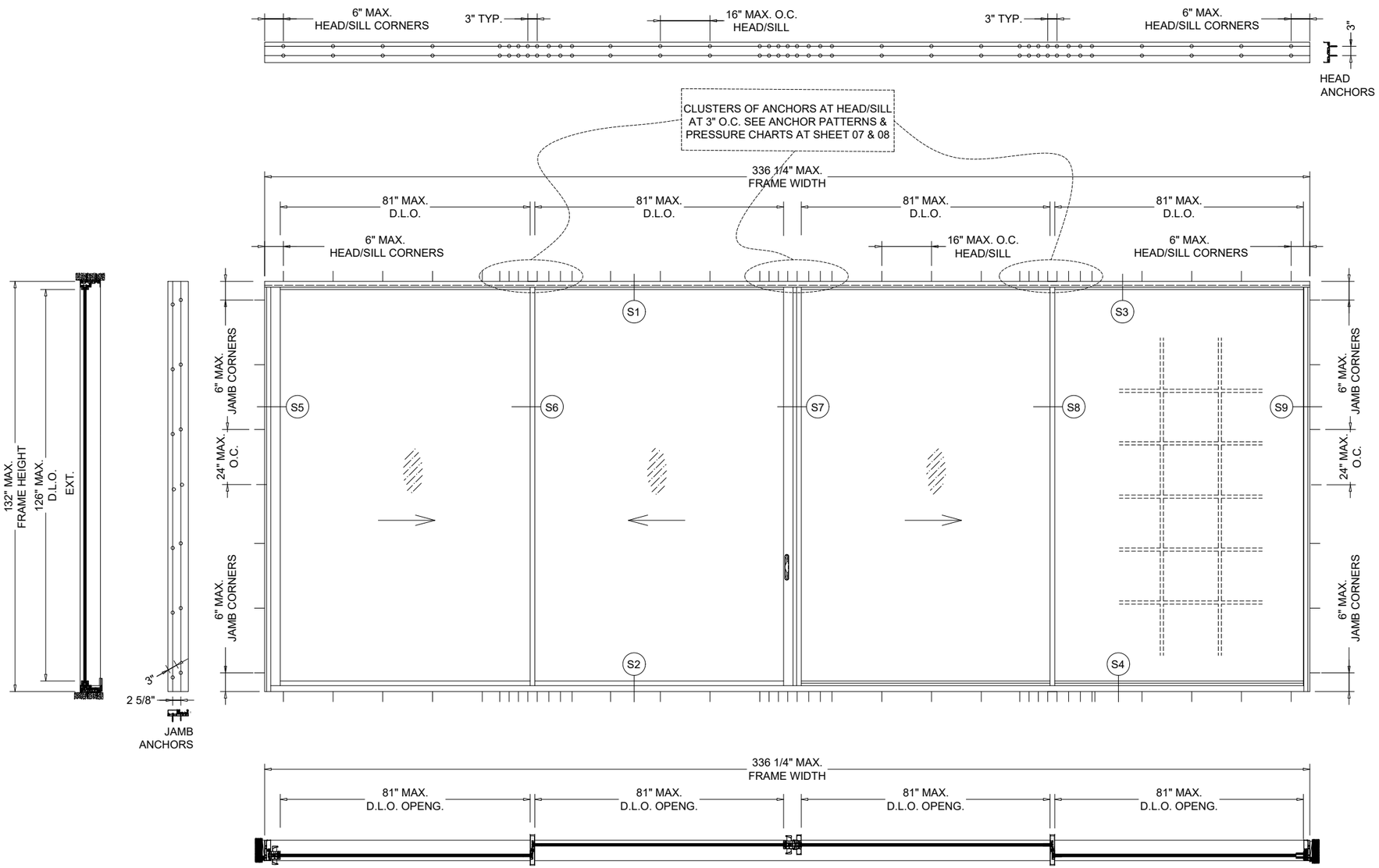
Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 – C.A.N. 34254

JAVAD AHMAD LICENSE No 70592 STATE OF FLORIDA PROFESSIONAL ENGINEER

SEALED: 06-17-2026

GLAZING DETAILS

SHEET No. 02 OF 25



TYPICAL ELEVATION
XX-XO

FL# 47930.2

DESIGN PRESSURE
MAX. +100 / -100 PSF

NOTES:
SEE SHEETS 06, 07& 08 FOR
DETAILED PRESSURE CHARTS.

NOTES:
SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

SEALANT
ALL WINDOW STOP,DRIP CAP,FRAME CORNERS, JOINT, MULLION SEAMS AND GLAZING BEAD TO FRAME SEALED WITH SILICONE SEALANT.

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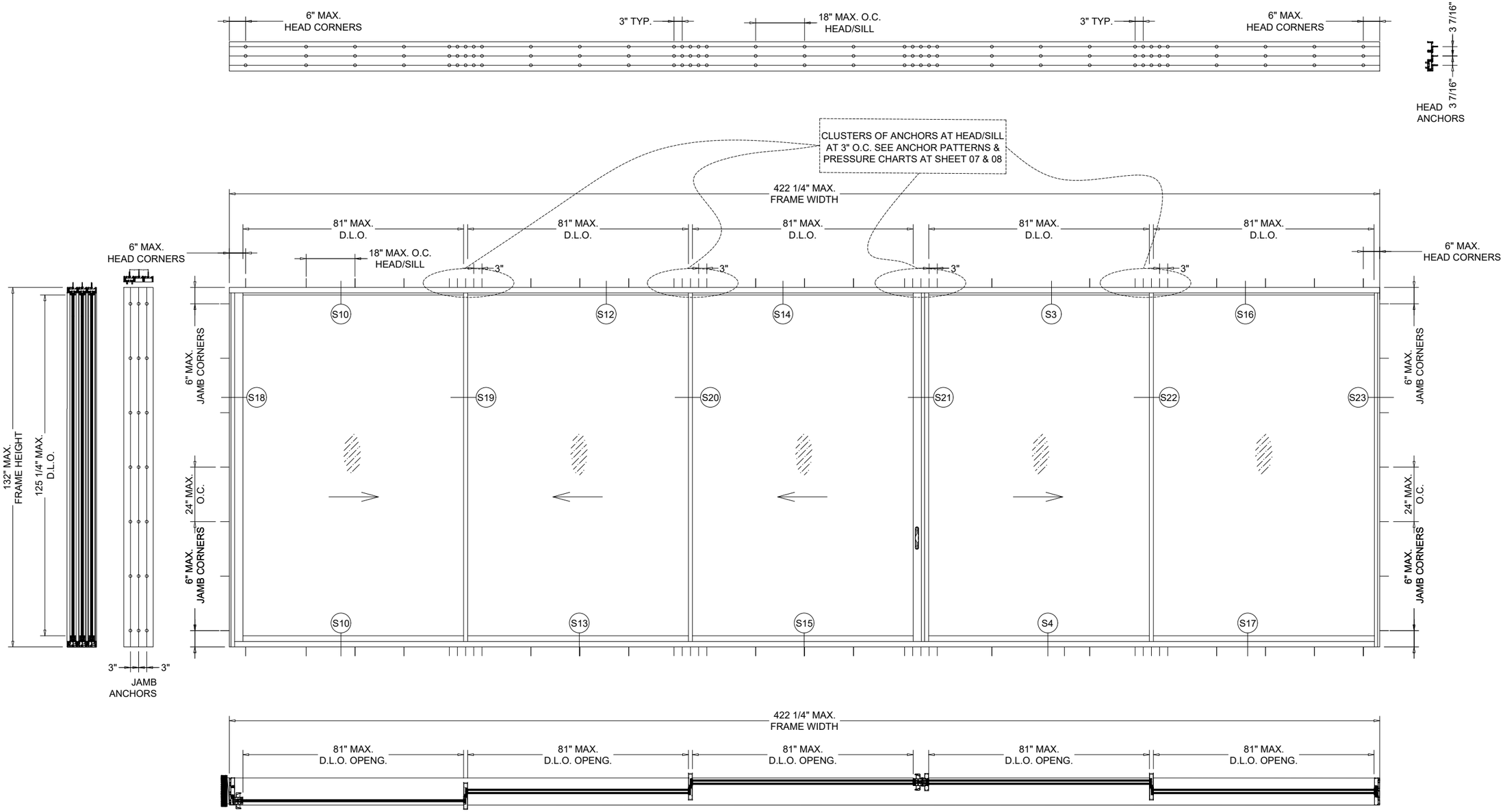
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JAVAD AHMAD LICENSE No 70592 STATE OF FLORIDA PROFESSIONAL ENGINEER

SEALED: 06-17-2026

TYP. ELEV.

SHEET No.
03 OF 25



DESIGN PRESSURE
MAX. +100 / -100 PSF

NOTES:
SEE SHEETS 06, 07& 08 FOR
DETAILED PRESSURE CHARTS.

TYPICAL ELEVATION
XXX-XO

FL# 47930.2

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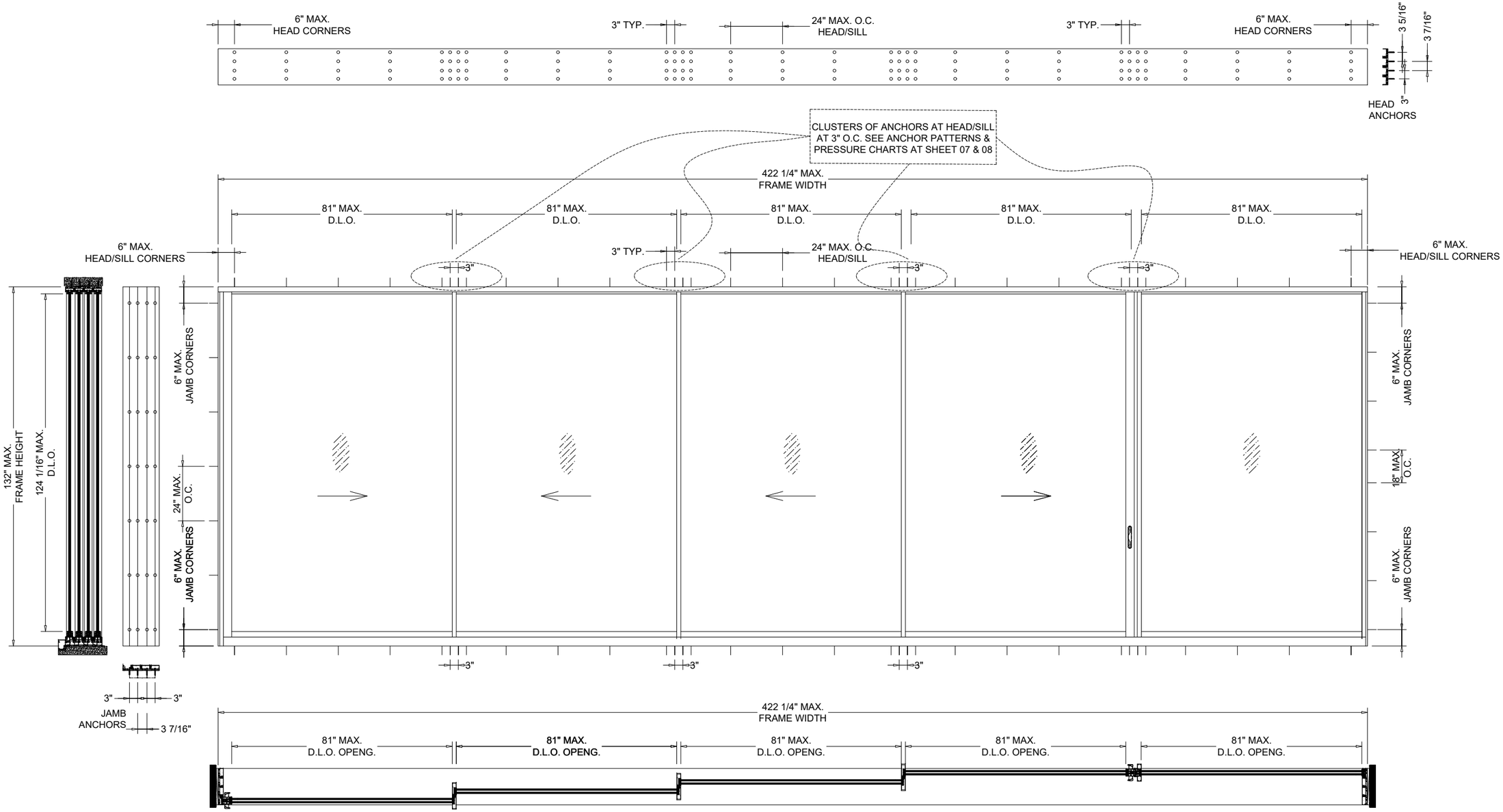
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TYP. ELEV.

SHEET No.
04 OF 25



DESIGN PRESSURE
MAX. +100 / -100 PSF

NOTES:
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DETAILED PRESSURE CHARTS.

TYPICAL ELEVATION
XXXX-O

NOTES:
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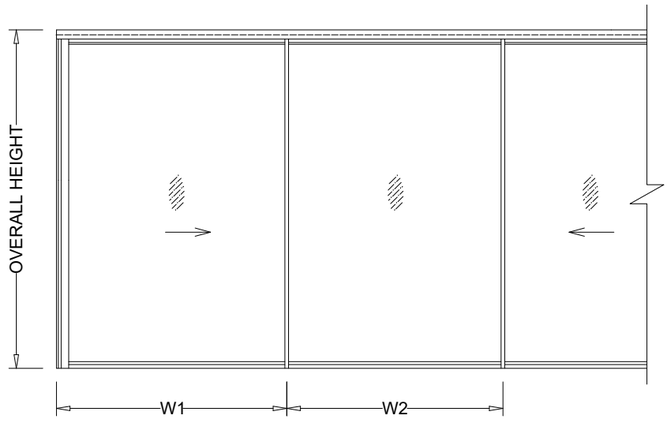
SHEET No.
05 OF 25

DOOR INTERLOCKS ALLOWABLE PRESSURE CHARTS:

INTERLOCK DESIGN LOAD CAPACITY (PSF)			
AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	W/O REINF.	W REINF.
		+/- PSF	+/- PSF
36	102	100.0	100.0
48		100.0	100.0
60		100.0	100.0
72		100.0	100.0
84		100.0	100.0
36	108	100.0	100.0
48		100.0	100.0
60		100.0	100.0
72		100.0	100.0
84		100.0	100.0
36	114	100.0	100.0
48		100.0	100.0
60		100.0	100.0
72		100.0	100.0
84		100.0	100.0
36	120	100.0	100.0
48		100.0	100.0
60		100.0	100.0
72		100.0	100.0
84		100.0	100.0
36	126	100.0	100.0
48		100.0	100.0
60		100.0	100.0
72		100.0	100.0
84		94.8	100.0
36	132	100.0	100.0
48		100.0	100.0
60		100.0	100.0
72		100.0	100.0
84		86.4	100.0

MEETING STILE DESIGN LOAD CAPACITY (PSF)			
AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	W/O REINF.	W REINF.
		+/- PSF	+/- PSF
36	102	100.0	100.0
48		100.0	100.0
60		100.0	100.0
72		85.1	100.0
84		72.9	100.0
36	108	100.0	100.0
48		100.0	100.0
60		91.1	100.0
72		75.9	100.0
84		65.0	95.3
36	114	100.0	100.0
48		100.0	100.0
60		81.7	100.0
72		68.1	91.9
84		58.4	83.4
36	120	100.0	100.0
48		91.2	100.0
60		73.0	94.2
72		60.8	81.7
84		52.1	73.7
36	126	100.0	100.0
48		78.8	100.0
60		63.0	84.7
72		52.5	73.2
84		45.0	65.6
36	132	91.4	100.0
48		68.5	93.3
60		54.8	76.6
72		45.7	66.0
84		39.1	58.9

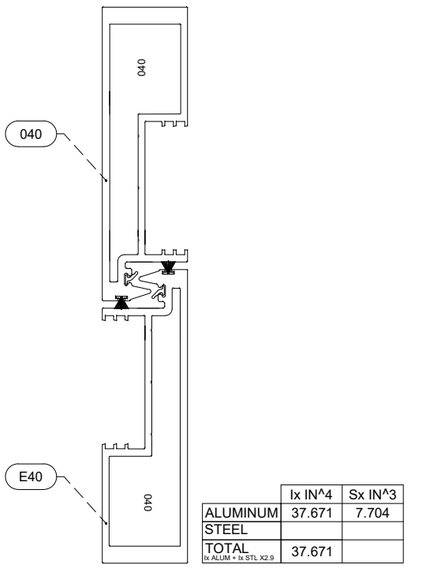
NOTE: INTERPOLATION BETWEEN WIDTHS IS ALLOWED



AT FRAME JAMBS, AVERAGE
PANEL WIDTH, W = W1

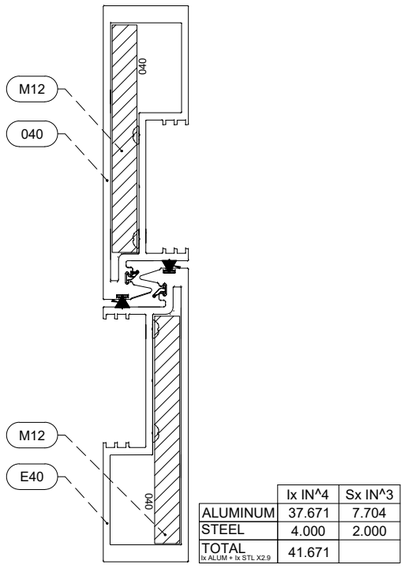
AT FRAME MULLIONS, AVERAGE
PANEL WIDTH, W = (W1 + W2) / 2

FOR SGDs ALL CONFIG.



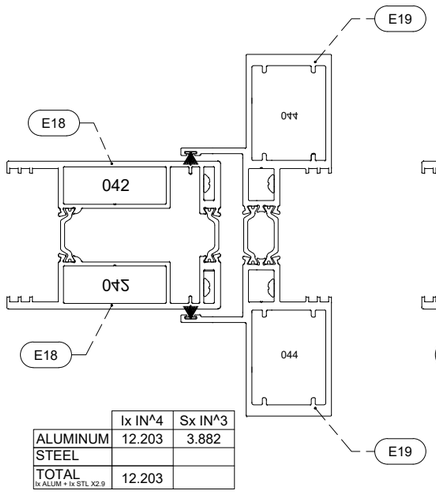
	Ix IN^4	Sx IN^3
ALUMINUM	37.671	7.704
STEEL		
TOTAL Ix ALUM + Ix STL X2.9	37.671	

STANDARD INTERLOCK
SCALE = 4-1/2" = 1'-0"



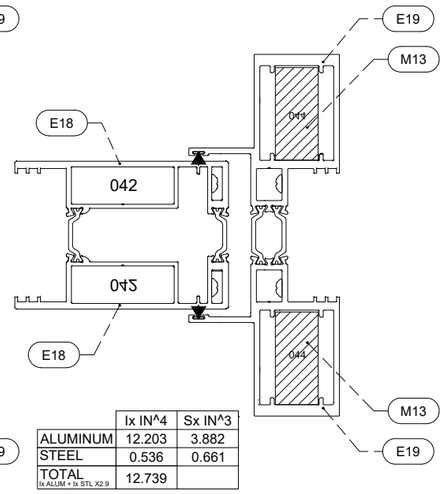
	Ix IN^4	Sx IN^3
ALUMINUM	37.671	7.704
STEEL	4.000	2.000
TOTAL Ix ALUM + Ix STL X2.9	41.671	

INTERLOCK W/ REINF.
SCALE = 4-1/2" = 1'-0"



	Ix IN^4	Sx IN^3
ALUMINUM	12.203	3.882
STEEL		
TOTAL Ix ALUM + Ix STL X2.9	12.203	

STANDARD ASTRAGAL
SCALE = 4-1/2" = 1'-0"



	Ix IN^4	Sx IN^3
ALUMINUM	12.203	3.882
STEEL	0.536	0.661
TOTAL Ix ALUM + Ix STL X2.9	12.739	

ASTRAGAL W/ REINF.
SCALE = 4-1/2" = 1'-0"

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PRESSURE CHART

SHEET No. 06 OF 25

CLUSTER ANCHORS ALLOWABLE PRESSURE CHARTS:

FOR 2 TRACK & 4 TRACK SLIDING GLASS DOOR

ANCHORS 'A' & 'B' LOAD CHART - 1/4" MAX. SHIM (PSF)

AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	CLUSTER ANCHORS @ MTG. STILE ENDS			
		4	8	12	16
36	102	100.0	100.0	100.0	100.0
48		88.8	100.0	100.0	100.0
60		71.0	100.0	100.0	100.0
72		59.2	100.0	100.0	100.0
84		50.7	100.0	100.0	100.0
36	108	100.0	100.0	100.0	100.0
48		83.8	100.0	100.0	100.0
60		67.1	100.0	100.0	100.0
72		55.9	100.0	100.0	100.0
84		47.9	95.8	100.0	100.0
36	114	100.0	100.0	100.0	100.0
48		79.4	100.0	100.0	100.0
60		63.5	100.0	100.0	100.0
72		52.9	100.0	100.0	100.0
84		45.4	90.8	100.0	100.0
36	120	100.0	100.0	100.0	100.0
48		75.5	100.0	100.0	100.0
60		60.4	100.0	100.0	100.0
72		50.3	100.0	100.0	100.0
84		43.1	86.2	100.0	100.0
36	126	95.8	100.0	100.0	100.0
48		71.9	100.0	100.0	100.0
60		57.5	100.0	100.0	100.0
72		47.9	95.8	100.0	100.0
84		41.1	82.1	100.0	100.0
36	132	91.5	100.0	100.0	100.0
48		68.6	100.0	100.0	100.0
60		54.9	100.0	100.0	100.0
72		45.7	91.5	100.0	100.0
84		39.2	78.4	100.0	100.0

ANCHORS 'A' & 'B' LOAD CHART - 3/8" MAX. SHIM (PSF)

AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	CLUSTER ANCHORS @ MTG. STILE ENDS			
		4	8	12	16
36	102	85.1	100.0	100.0	100.0
48		63.8	100.0	100.0	100.0
60		51.1	100.0	100.0	100.0
72		42.6	85.1	100.0	100.0
84		36.5	72.9	100.0	100.0
36	108	80.4	100.0	100.0	100.0
48		60.3	100.0	100.0	100.0
60		48.2	96.4	100.0	100.0
72		40.2	80.4	100.0	100.0
84		34.4	68.9	100.0	100.0
36	114	76.1	100.0	100.0	100.0
48		57.1	100.0	100.0	100.0
60		45.7	91.4	100.0	100.0
72		38.1	76.1	100.0	100.0
84		32.6	65.3	97.9	100.0
36	120	72.3	100.0	100.0	100.0
48		54.3	100.0	100.0	100.0
60		43.4	86.8	100.0	100.0
72		36.2	72.3	100.0	100.0
84		31.0	62.0	93.0	100.0
36	126	68.9	100.0	100.0	100.0
48		51.7	100.0	100.0	100.0
60		41.3	82.7	100.0	100.0
72		34.4	68.9	100.0	100.0
84		29.5	59.0	88.6	100.0
36	132	65.8	100.0	100.0	100.0
48		49.3	98.6	100.0	100.0
60		39.5	78.9	100.0	100.0
72		32.9	65.8	98.6	100.0
84		28.2	56.4	84.5	100.0

FOR 3 TRACK SLIDING GLASS DOOR

ANCHORS 'A' & 'B' LOAD CHART - 1/4" MAX. SHIM (PSF)

AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	CLUSTER ANCHORS @ MTG. STILE ENDS			
		6	9	12	15
36	102	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		100.0	100.0	100.0	100.0
72		88.8	100.0	100.0	100.0
84		76.1	100.0	100.0	100.0
36	108	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		100.0	100.0	100.0	100.0
72		83.8	100.0	100.0	100.0
84		71.9	100.0	100.0	100.0
36	114	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		95.3	100.0	100.0	100.0
72		79.4	100.0	100.0	100.0
84		68.1	100.0	100.0	100.0
36	120	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		90.5	100.0	100.0	100.0
72		75.5	100.0	100.0	100.0
84		64.7	97.0	100.0	100.0
36	126	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		86.2	100.0	100.0	100.0
72		71.9	100.0	100.0	100.0
84		61.6	92.4	100.0	100.0
36	132	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		82.3	100.0	100.0	100.0
72		68.6	100.0	100.0	100.0
84		58.8	88.2	100.0	100.0

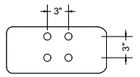
ANCHORS 'A' & 'B' LOAD CHART - 3/8" MAX. SHIM (PSF)

AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	CLUSTER ANCHORS @ MTG. STILE ENDS			
		6	9	12	15
36	102	100.0	100.0	100.0	100.0
48		95.7	100.0	100.0	100.0
60		76.6	100.0	100.0	100.0
72		63.8	95.7	100.0	100.0
84		54.7	82.1	100.0	100.0
36	108	100.0	100.0	100.0	100.0
48		90.4	100.0	100.0	100.0
60		72.3	100.0	100.0	100.0
72		60.3	90.4	100.0	100.0
84		51.7	77.5	100.0	100.0
36	114	100.0	100.0	100.0	100.0
48		85.7	100.0	100.0	100.0
60		68.5	100.0	100.0	100.0
72		57.1	85.7	100.0	100.0
84		48.9	73.4	97.9	100.0
36	120	100.0	100.0	100.0	100.0
48		81.4	100.0	100.0	100.0
60		65.1	97.7	100.0	100.0
72		54.3	81.4	100.0	100.0
84		46.5	69.8	93.0	100.0
36	126	100.0	100.0	100.0	100.0
48		77.5	100.0	100.0	100.0
60		62.0	93.0	100.0	100.0
72		51.7	77.5	100.0	100.0
84		44.3	66.4	88.6	100.0
36	132	98.6	100.0	100.0	100.0
48		74.0	100.0	100.0	100.0
60		59.2	88.8	100.0	100.0
72		49.3	74.0	98.6	100.0
84		42.3	63.4	84.5	100.0

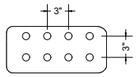
ANCHORS PATTERN AT INTERLOCK & ASTRAGAL ENDS:

2 TRACK DOOR

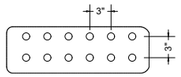
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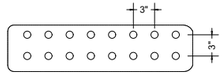
CLUSTER OF (8) ANCHORS:



CLUSTER OF (12) ANCHORS:

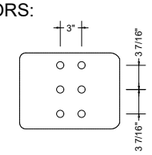


CLUSTER OF (16) ANCHORS:

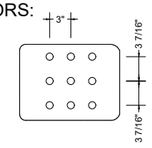


3 TRACK DOOR

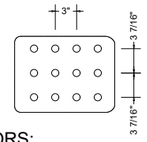
CLUSTER OF (6) ANCHORS:



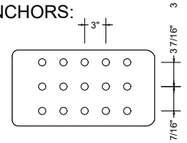
CLUSTER OF (9) ANCHORS:



CLUSTER OF (12) ANCHORS:

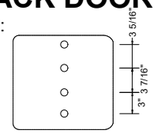


CLUSTER OF (15) ANCHORS:

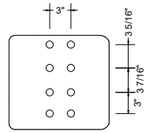


4 TRACK DOOR

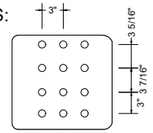
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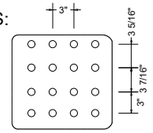
CLUSTER OF (8) ANCHORS:

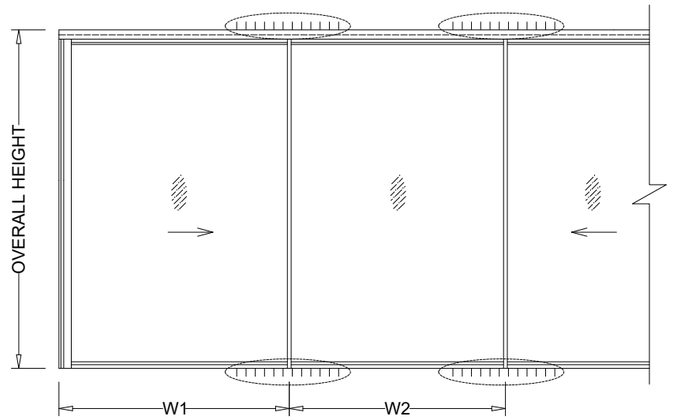


CLUSTER OF (12) ANCHORS:



CLUSTER OF (16) ANCHORS:





FOR SGDs ALL CONFIG.

AT FRAME JAMBS, AVERAGE
PANEL WIDTH, W = W1

AT FRAME MULLIONS, AVERAGE
PANEL WIDTH, W = (W1 + W2) / 2

SEE CLUSTER ANCHOR PATTERN ON THE LEFT

NOTE: INTERPOLATION BETWEEN
WIDTHS OR HEIGHTS IS ALLOWED

FL# 47930.2

JAVAD AHMAD PE, inc
7875 NW 12 Street, Suite 102
Doral, FL 33126
Ph: (305) 424-8001
support@ja-pe.com
CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

ES-SGD 1515T
(L.M.I & S.M.I)

CLIENT :

E.S. WINDOWS, LLC

3550 N.W. 49 STREET
MIAMI, FL 33142
TEL. (305) 638-5151
FAX. (305) 638-5158

REVISION

No.	DATE	BY	DESCRIPTION
0			

date:	6/17/2026
scale:	N/A
drawn by:	M.S.
check by:	
Drawing no.	JA-1445-26

Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 – C.A.N. 34254



SEALED: 06-17-2026

PRESSURE CHART

SHEET No.
07 OF 25

CLUSTER ANCHORS ALLOWABLE PRESSURE CHARTS:

FOR 2 TRACK & 4 TRACK SLIDING GLASS DOOR

ANCHORS 'C' LOAD CHART - 1/4" MAX. SHIM (PSF)

AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	CLUSTER ANCHORS @ MTG. STILE ENDS			
		4	8	12	16
36	102	100.0	100.0	100.0	100.0
48		83.2	100.0	100.0	100.0
60		66.5	100.0	100.0	100.0
72		55.4	100.0	100.0	100.0
84		47.5	95.0	100.0	100.0
36	108	100.0	100.0	100.0	100.0
48		78.5	100.0	100.0	100.0
60		62.8	100.0	100.0	100.0
72		52.4	100.0	100.0	100.0
84		44.9	89.8	100.0	100.0
36	114	99.2	100.0	100.0	100.0
48		74.4	100.0	100.0	100.0
60		59.5	100.0	100.0	100.0
72		49.6	99.2	100.0	100.0
84		42.5	85.0	100.0	100.0
36	120	94.3	100.0	100.0	100.0
48		70.7	100.0	100.0	100.0
60		56.6	100.0	100.0	100.0
72		47.1	94.3	100.0	100.0
84		40.4	80.8	100.0	100.0
36	126	89.8	100.0	100.0	100.0
48		67.3	100.0	100.0	100.0
60		53.9	100.0	100.0	100.0
72		44.9	89.8	100.0	100.0
84		38.5	76.9	100.0	100.0
36	132	85.7	100.0	100.0	100.0
48		64.3	100.0	100.0	100.0
60		51.4	100.0	100.0	100.0
72		42.8	85.7	100.0	100.0
84		36.7	73.4	100.0	100.0

ANCHORS 'C' LOAD CHART - 3/8" MAX. SHIM (PSF)

AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	CLUSTER ANCHORS @ MTG. STILE ENDS			
		4	8	12	16
36	102	80.3	100.0	100.0	100.0
48		60.2	100.0	100.0	100.0
60		48.2	96.4	100.0	100.0
72		40.2	80.3	100.0	100.0
84		34.4	68.9	100.0	100.0
36	108	75.9	100.0	100.0	100.0
48		56.9	100.0	100.0	100.0
60		45.5	91.0	100.0	100.0
72		37.9	75.9	100.0	100.0
84		32.5	65.0	97.5	100.0
36	114	71.9	100.0	100.0	100.0
48		53.9	100.0	100.0	100.0
60		43.1	86.2	100.0	100.0
72		35.9	71.9	100.0	100.0
84		30.8	61.6	92.4	100.0
36	120	68.3	100.0	100.0	100.0
48		51.2	100.0	100.0	100.0
60		41.0	81.9	100.0	100.0
72		34.1	68.3	100.0	100.0
84		29.3	58.5	87.8	100.0
36	126	65.0	100.0	100.0	100.0
48		48.8	97.5	100.0	100.0
60		39.0	78.0	100.0	100.0
72		32.5	65.0	97.5	100.0
84		27.9	55.7	83.6	100.0
36	132	62.1	100.0	100.0	100.0
48		46.6	93.1	100.0	100.0
60		37.2	74.5	100.0	100.0
72		31.0	62.1	93.1	100.0
84		26.6	53.2	79.8	100.0

FOR 3 TRACK SLIDING GLASS DOOR

ANCHORS 'C' LOAD CHART - 1/4" MAX. SHIM (PSF)

AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	CLUSTER ANCHORS @ MTG. STILE ENDS			
		6	9	12	15
36	102	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		99.8	100.0	100.0	100.0
72		83.2	100.0	100.0	100.0
84		71.3	100.0	100.0	100.0
36	108	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		94.3	100.0	100.0	100.0
72		78.5	100.0	100.0	100.0
84		67.3	100.0	100.0	100.0
36	114	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		89.3	100.0	100.0	100.0
72		74.4	100.0	100.0	100.0
84		63.8	95.7	100.0	100.0
36	120	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		84.8	100.0	100.0	100.0
72		70.7	100.0	100.0	100.0
84		60.6	90.9	100.0	100.0
36	126	100.0	100.0	100.0	100.0
48		100.0	100.0	100.0	100.0
60		80.8	100.0	100.0	100.0
72		67.3	100.0	100.0	100.0
84		57.7	86.6	100.0	100.0
36	132	100.0	100.0	100.0	100.0
48		96.4	100.0	100.0	100.0
60		77.1	100.0	100.0	100.0
72		64.3	96.4	100.0	100.0
84		55.1	82.6	100.0	100.0

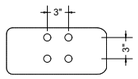
ANCHORS 'C' LOAD CHART - 3/8" MAX. SHIM (PSF)

AVG. PANEL WIDTH (INCH)	OVERALL HEIGHT (INCH)	CLUSTER ANCHORS @ MTG. STILE ENDS			
		6	9	12	15
36	102	100.0	100.0	100.0	100.0
48		90.4	100.0	100.0	100.0
60		72.3	100.0	100.0	100.0
72		60.2	90.4	100.0	100.0
84		51.6	77.5	100.0	100.0
36	108	100.0	100.0	100.0	100.0
48		85.3	100.0	100.0	100.0
60		68.3	100.0	100.0	100.0
72		56.9	85.3	100.0	100.0
84		48.8	73.2	97.5	100.0
36	114	100.0	100.0	100.0	100.0
48		80.9	100.0	100.0	100.0
60		64.7	97.0	100.0	100.0
72		53.9	80.9	100.0	100.0
84		46.2	69.3	92.4	100.0
36	120	100.0	100.0	100.0	100.0
48		76.8	100.0	100.0	100.0
60		61.4	92.2	100.0	100.0
72		51.2	76.8	100.0	100.0
84		43.9	65.8	87.8	100.0
36	126	97.5	100.0	100.0	100.0
48		73.2	100.0	100.0	100.0
60		58.5	87.8	100.0	100.0
72		48.8	73.2	97.5	100.0
84		41.8	62.7	83.6	100.0
36	132	93.1	100.0	100.0	100.0
48		69.8	100.0	100.0	100.0
60		55.9	83.8	100.0	100.0
72		46.6	69.8	93.1	100.0
84		39.9	59.9	79.8	99.8

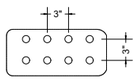
ANCHORS PATTERN AT INTERLOCK & ASTRAGAL ENDS:

2 TRACK DOOR

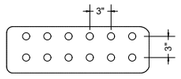
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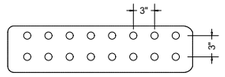
CLUSTER OF (8) ANCHORS:



CLUSTER OF (12) ANCHORS:

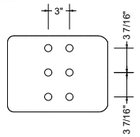


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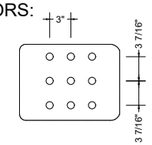


3 TRACK DOOR

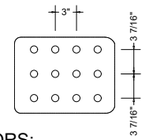
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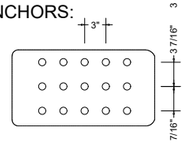
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CLUSTER OF (12) ANCHORS:

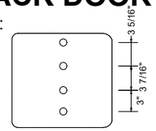


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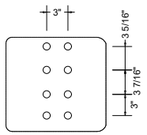


4 TRACK DOOR

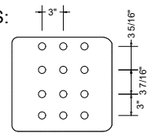
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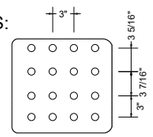
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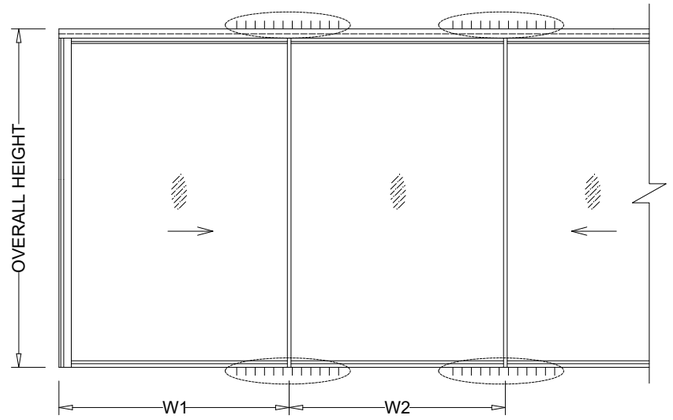


CLUSTER OF (12) ANCHORS:



CLUSTER OF (16) ANCHORS:





FOR SGDs ALL CONFIG.

AT FRAME JAMBS, AVERAGE PANEL WIDTH, W = W1

AT FRAME MULLIONS, AVERAGE PANEL WIDTH, W = (W1 + W2) / 2

SEE CLUSTER ANCHOR PATTERN ON THE LEFT

NOTE: INTERPOLATION BETWEEN WIDTHS OR HEIGHTS IS ALLOWED

FL# 47930.2

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ES-SGD 1515T
(L.M.I & S.M.I)

CLIENT :

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Drawing no.	JA-1445-26

Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 – C.A.N. 34254

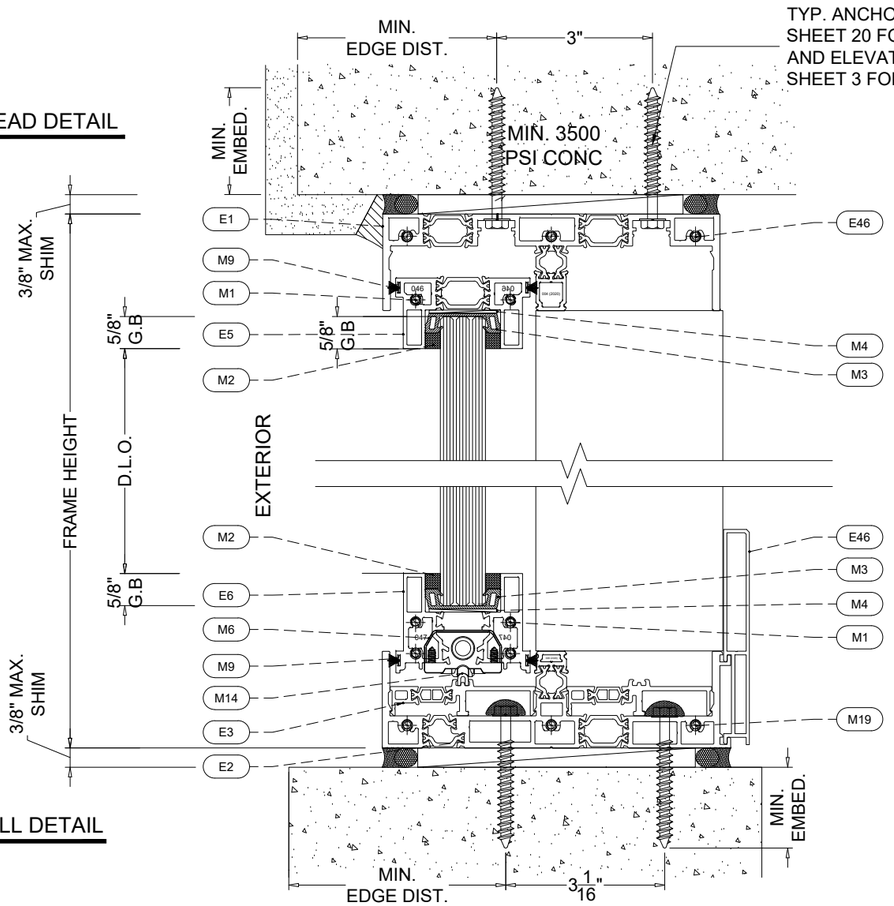


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PRESSURE CHART

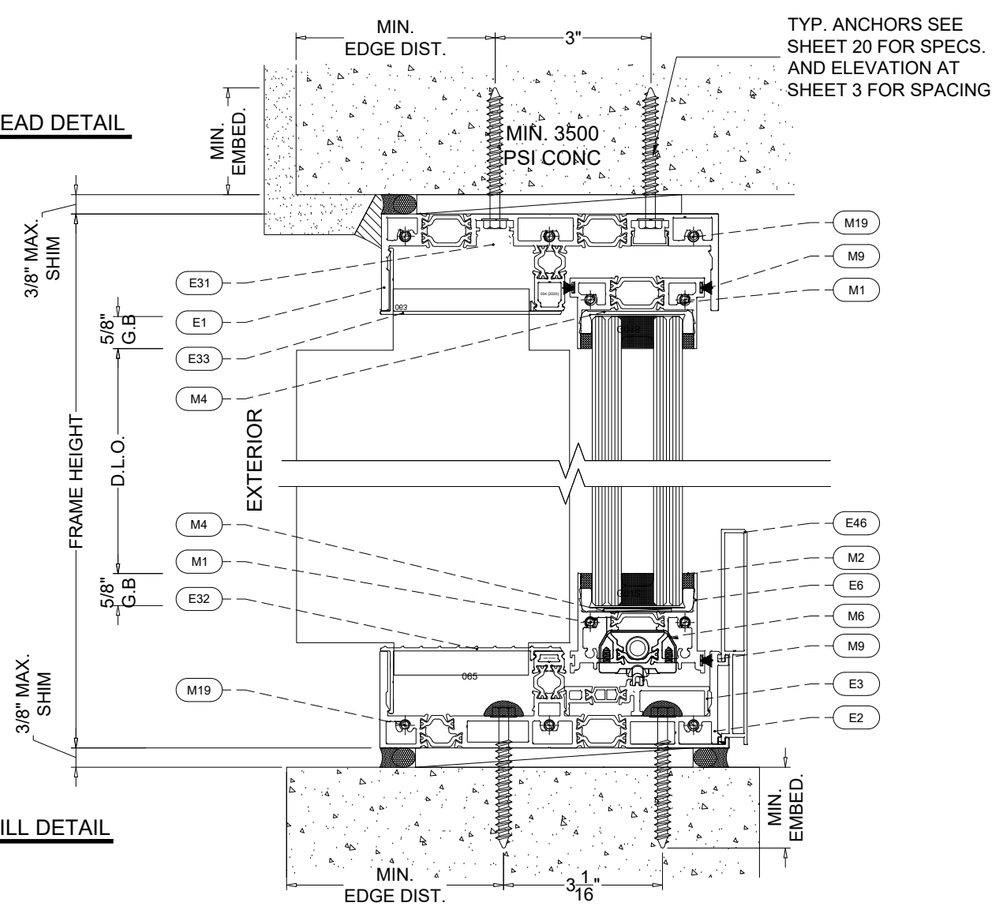
SHEET No. 08 OF 25

S1 HEAD DETAIL



S2 SILL DETAIL

S3 HEAD DETAIL



S4 SILL DETAIL

2 TRACK SYSTEM

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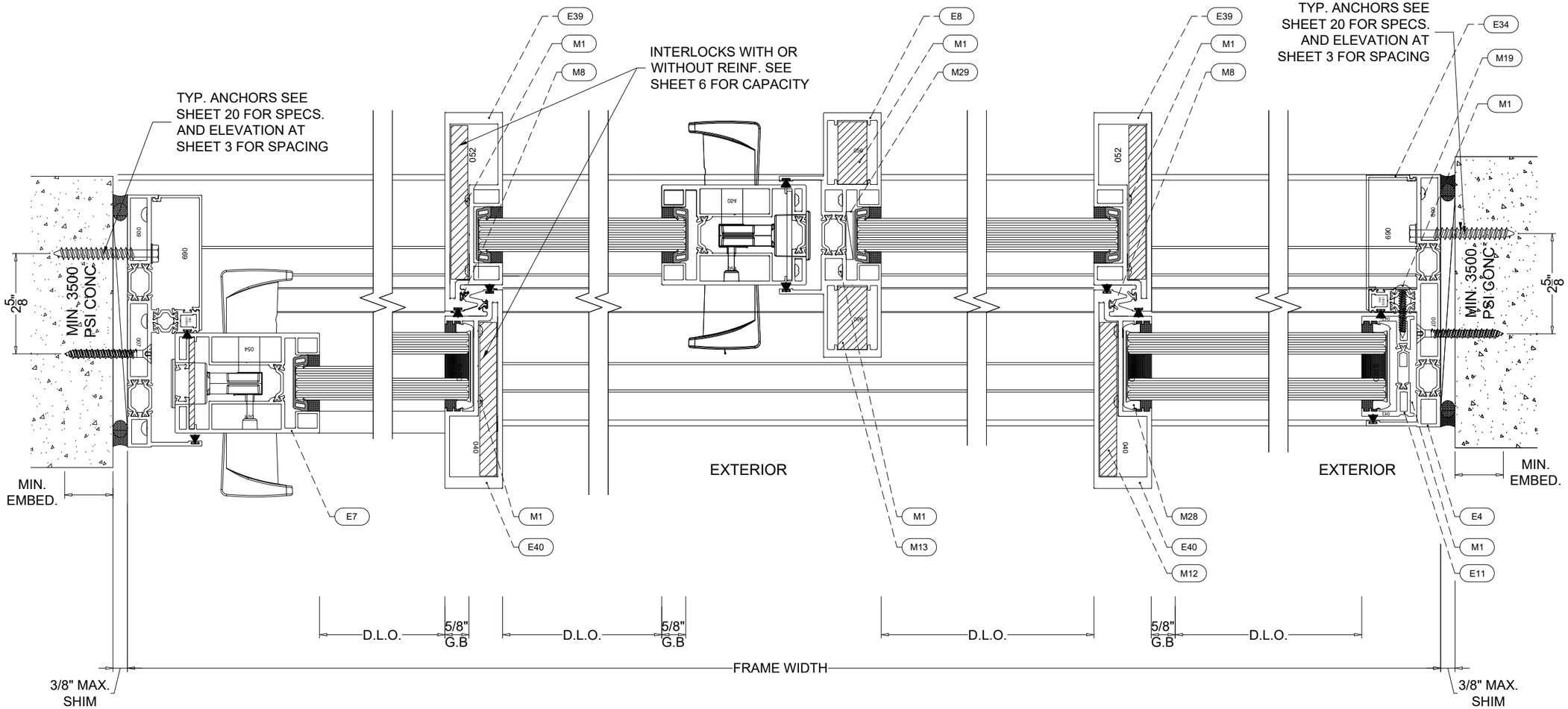
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SEC. DETAILS

SHEET No.
09 OF 25



S5 HANDLE DETAIL

S6 INTERLOCK DETAIL

S7 MEETING STILE

S8 INTERLOCK DETAIL

S9 JAMB DETAIL

2 TRACK SYSTEM

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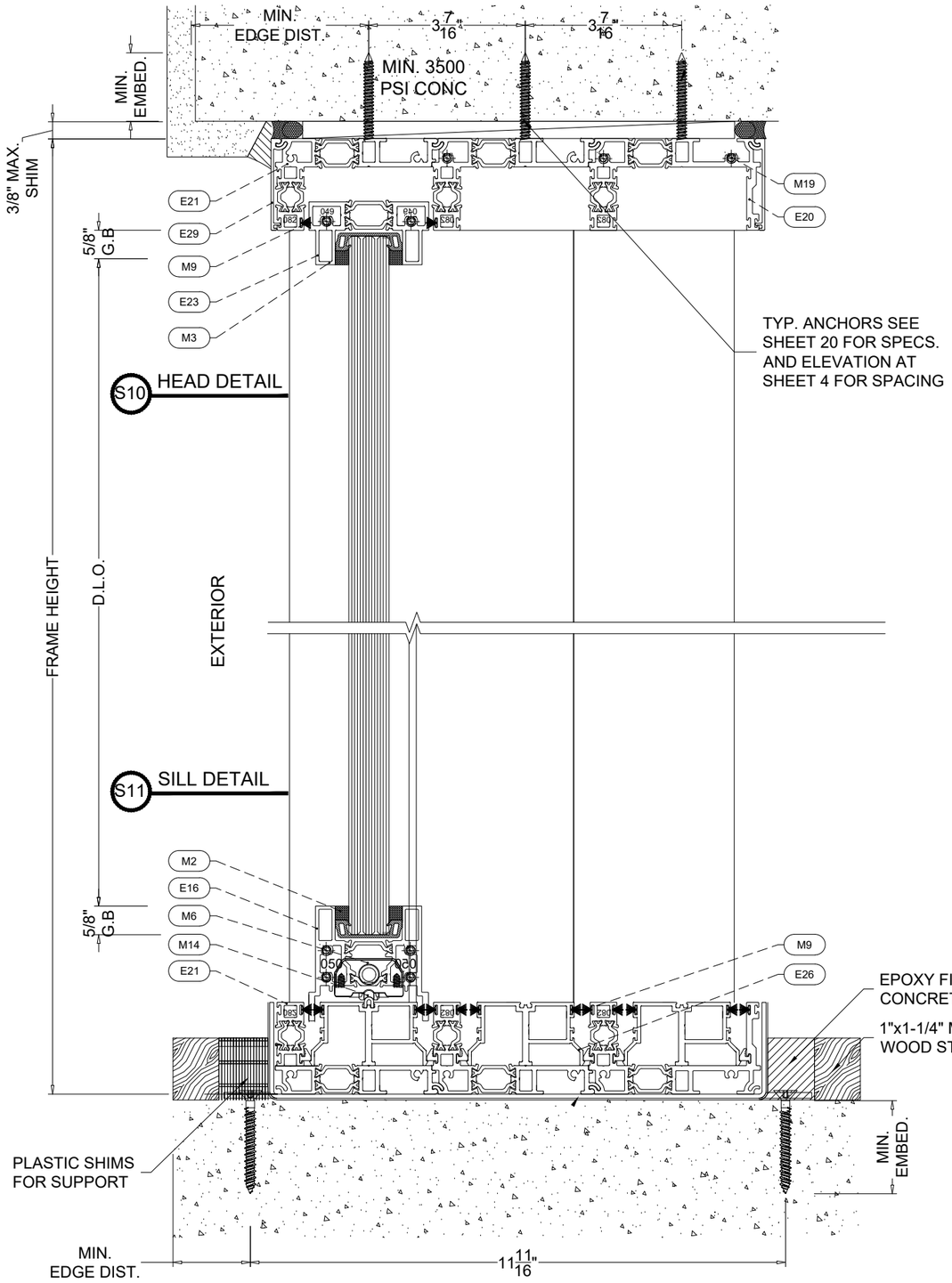
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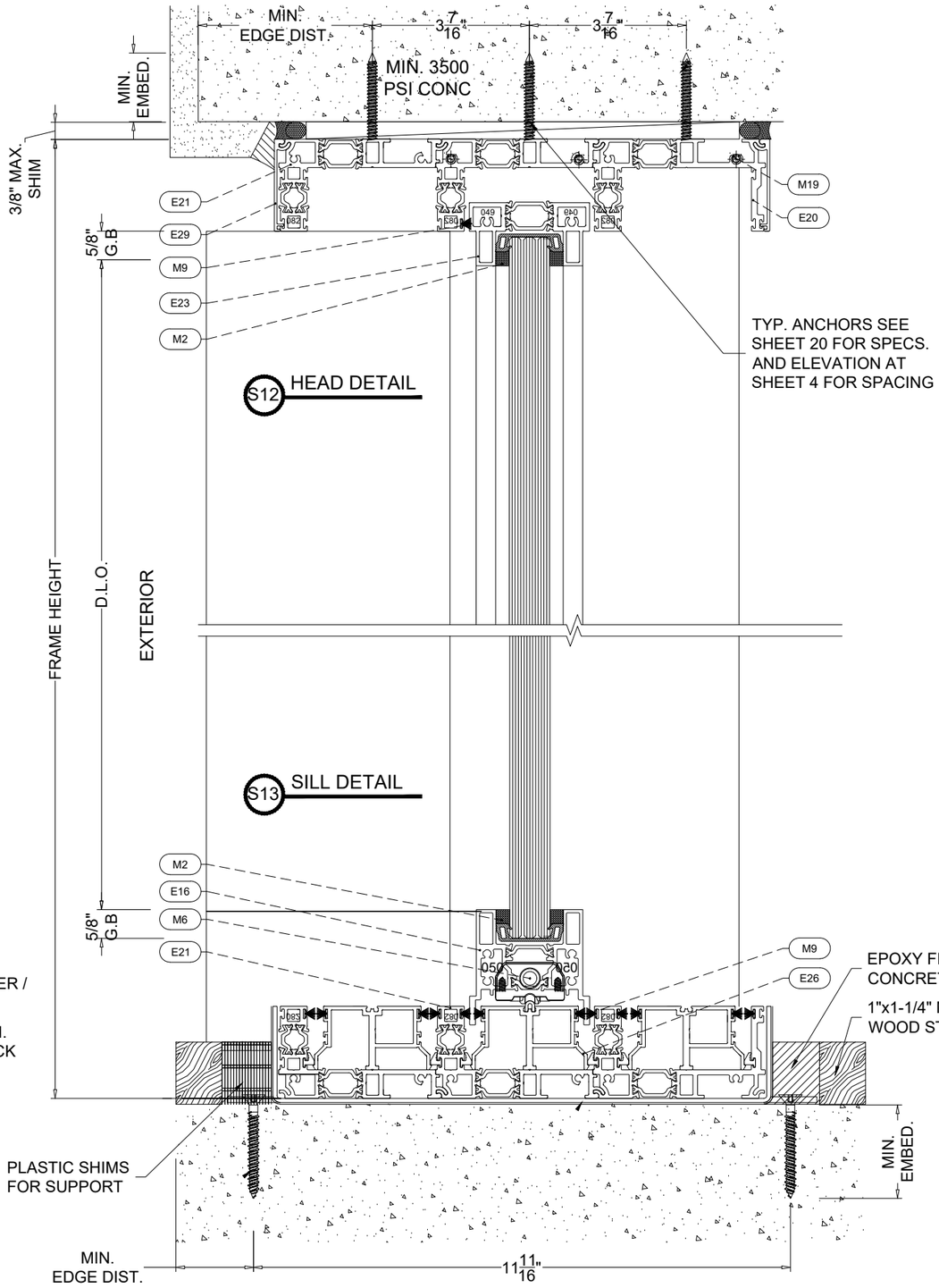
SHEET No. 10 OF 25



S10 HEAD DETAIL

S11 SILL DETAIL

3 TRACK SYSTEM



S12 HEAD DETAIL

S13 SILL DETAIL

FL# 47930.2

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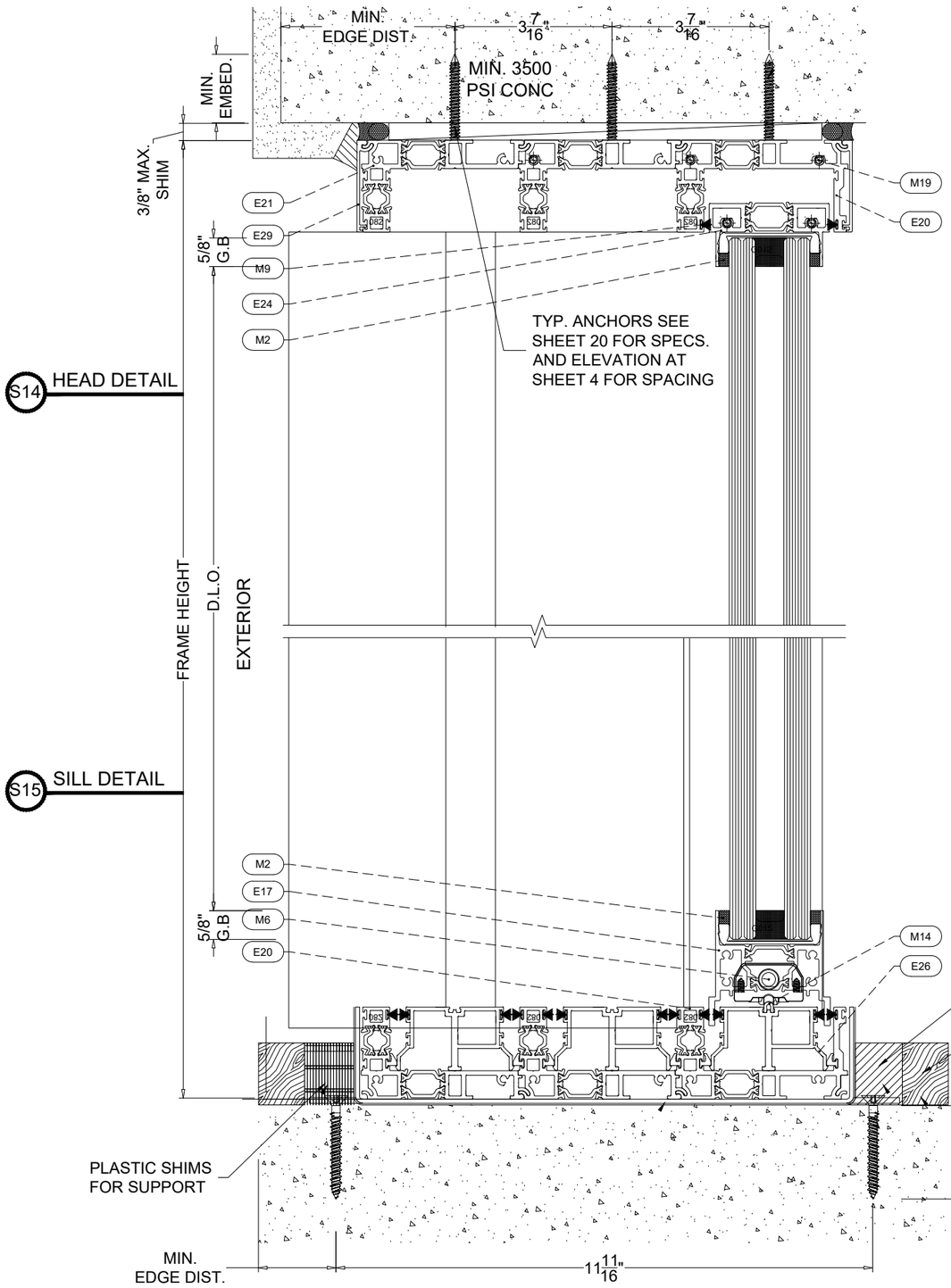
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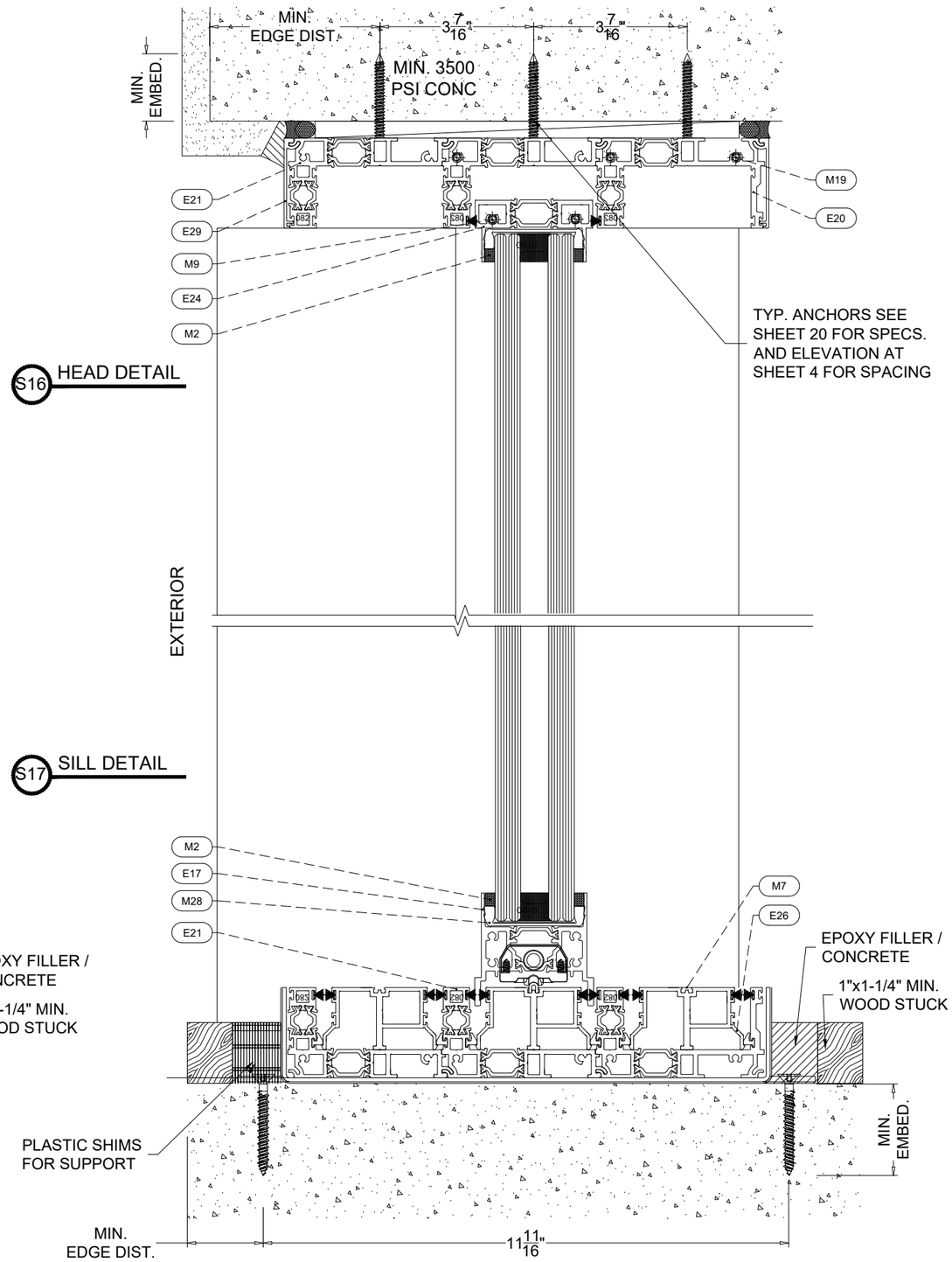
SHEET No. 11 OF 25



S14 HEAD DETAIL

S15 SILL DETAIL

3 TRACK SYSTEM



S16 HEAD DETAIL

S17 SILL DETAIL

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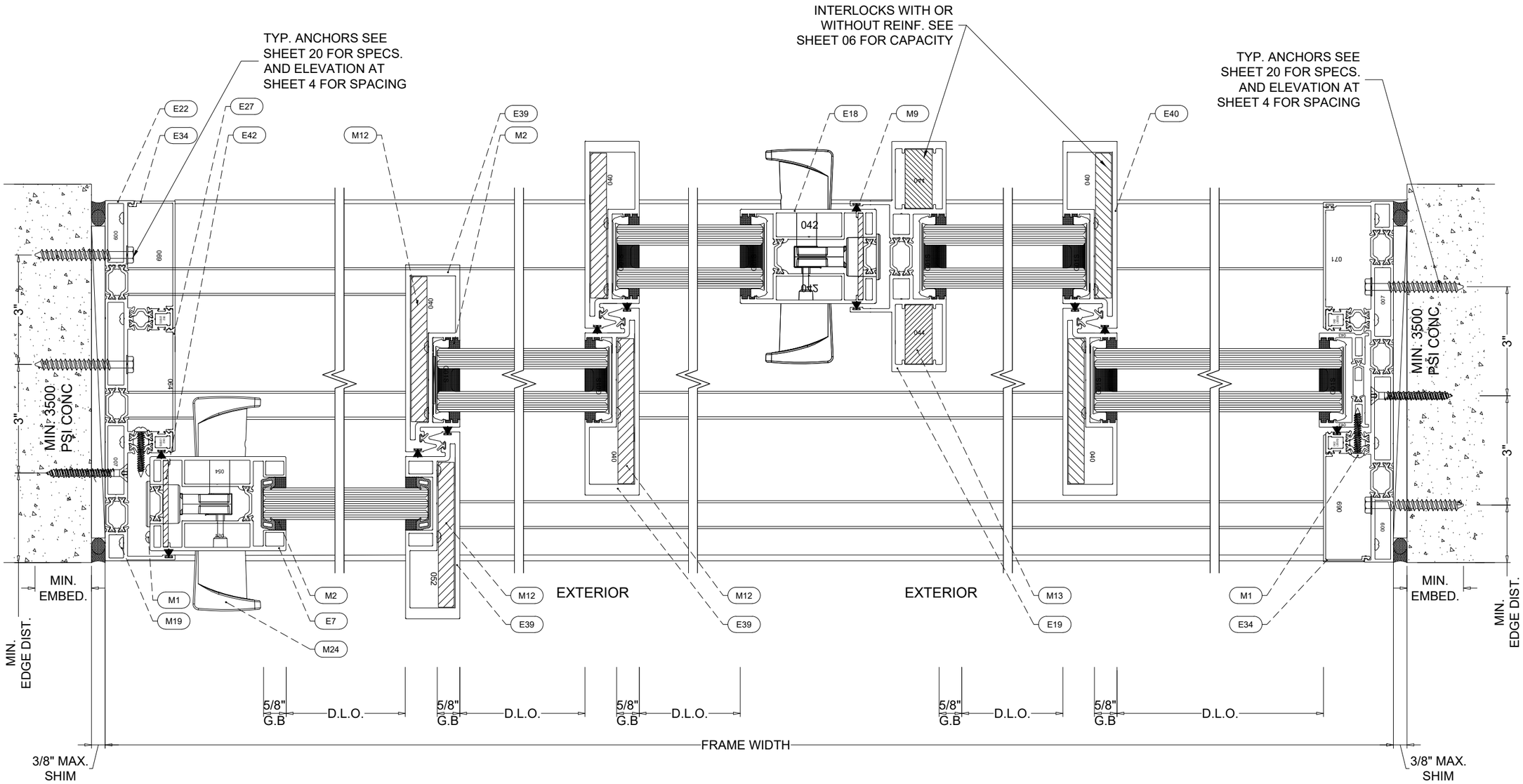
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SEC. DETAILS

SHEET No. 12 OF 25



S18 HANDLE DETAIL

S19 INTERLOCK DETAIL S20

S21 MEETING STILE

S22 INTERLOCK DETAIL

S23 JAMB DETAIL

3 TRACK SYSTEM

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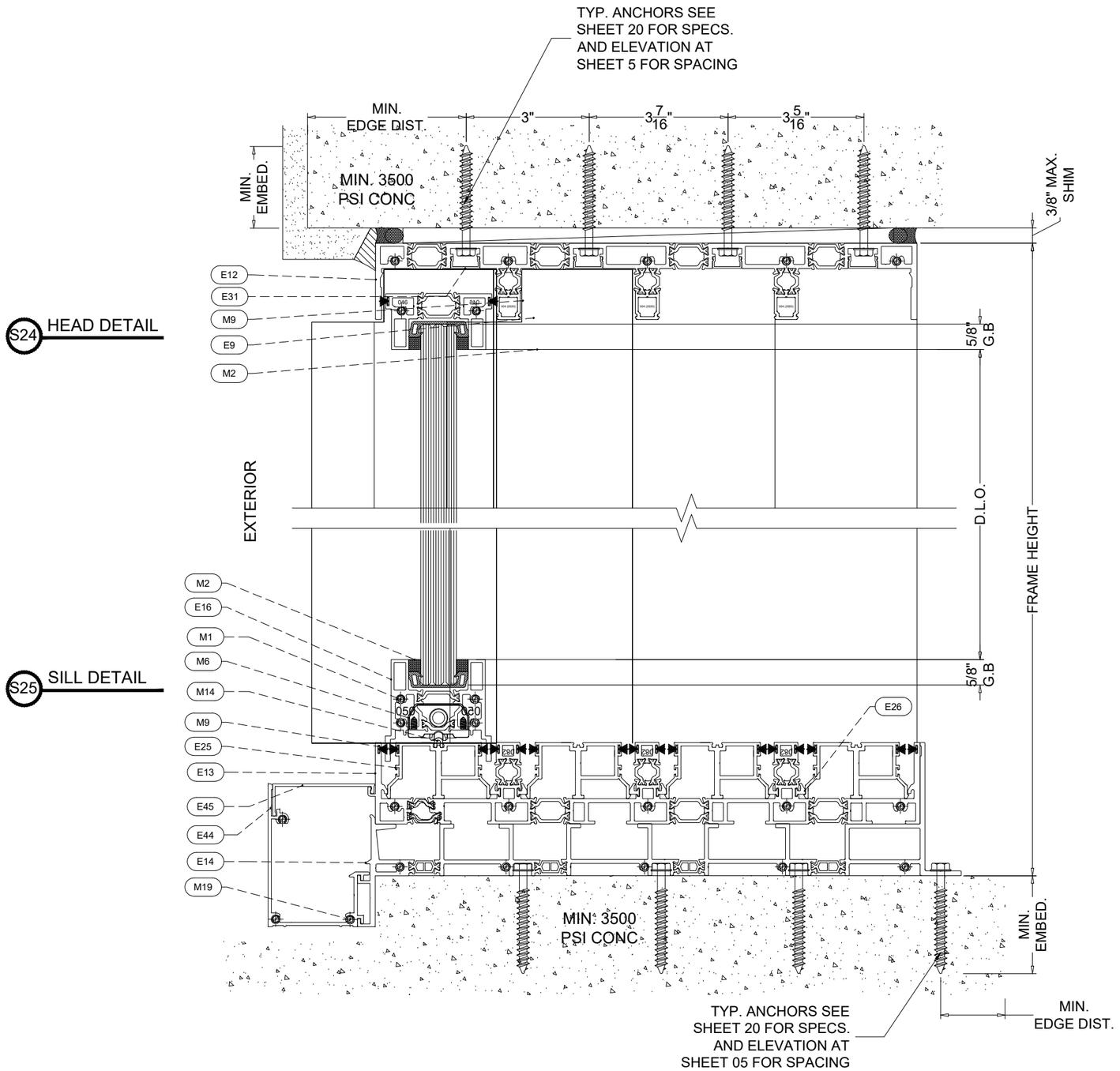
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SEC. DETAILS

SHEET No. 13 OF 25



S24 HEAD DETAIL

S25 SILL DETAIL

4 TRACK SYSTEM

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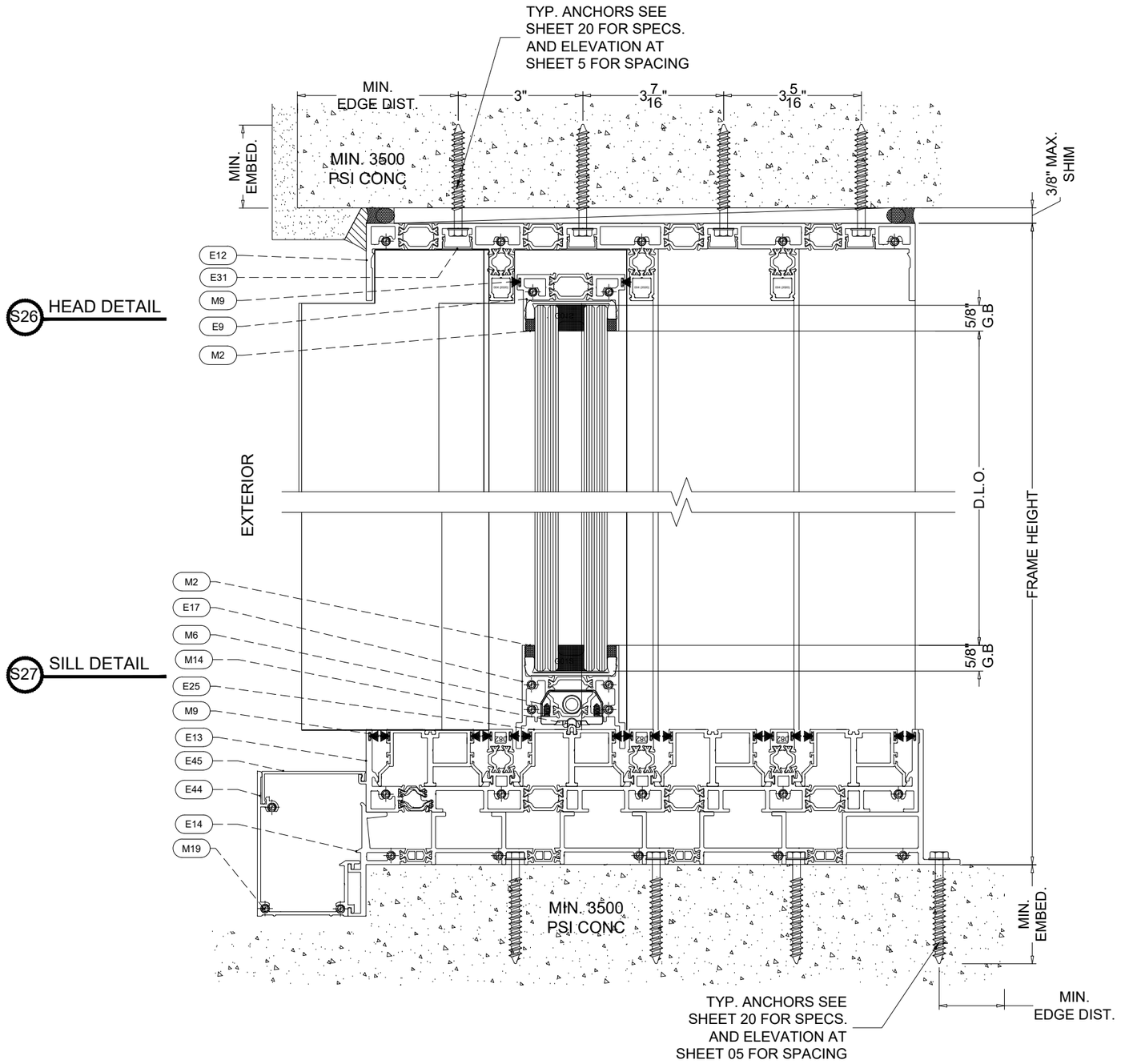
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SEC. DETAILS

SHEET No.
14 OF 25



4 TRACK SYSTEM

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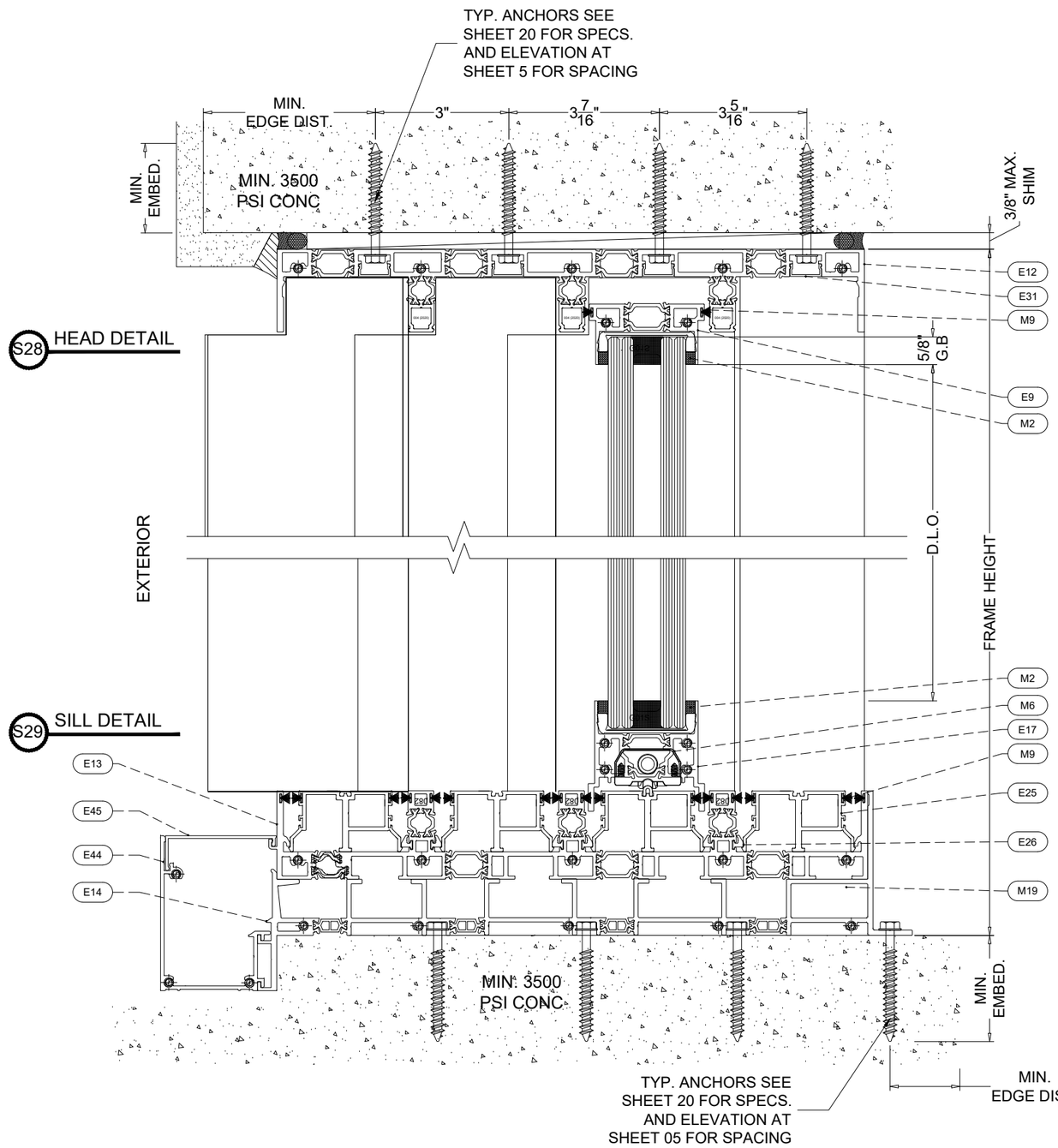
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SEC. DETAILS

SHEET No. 15 OF 25



4 TRACK SYSTEM

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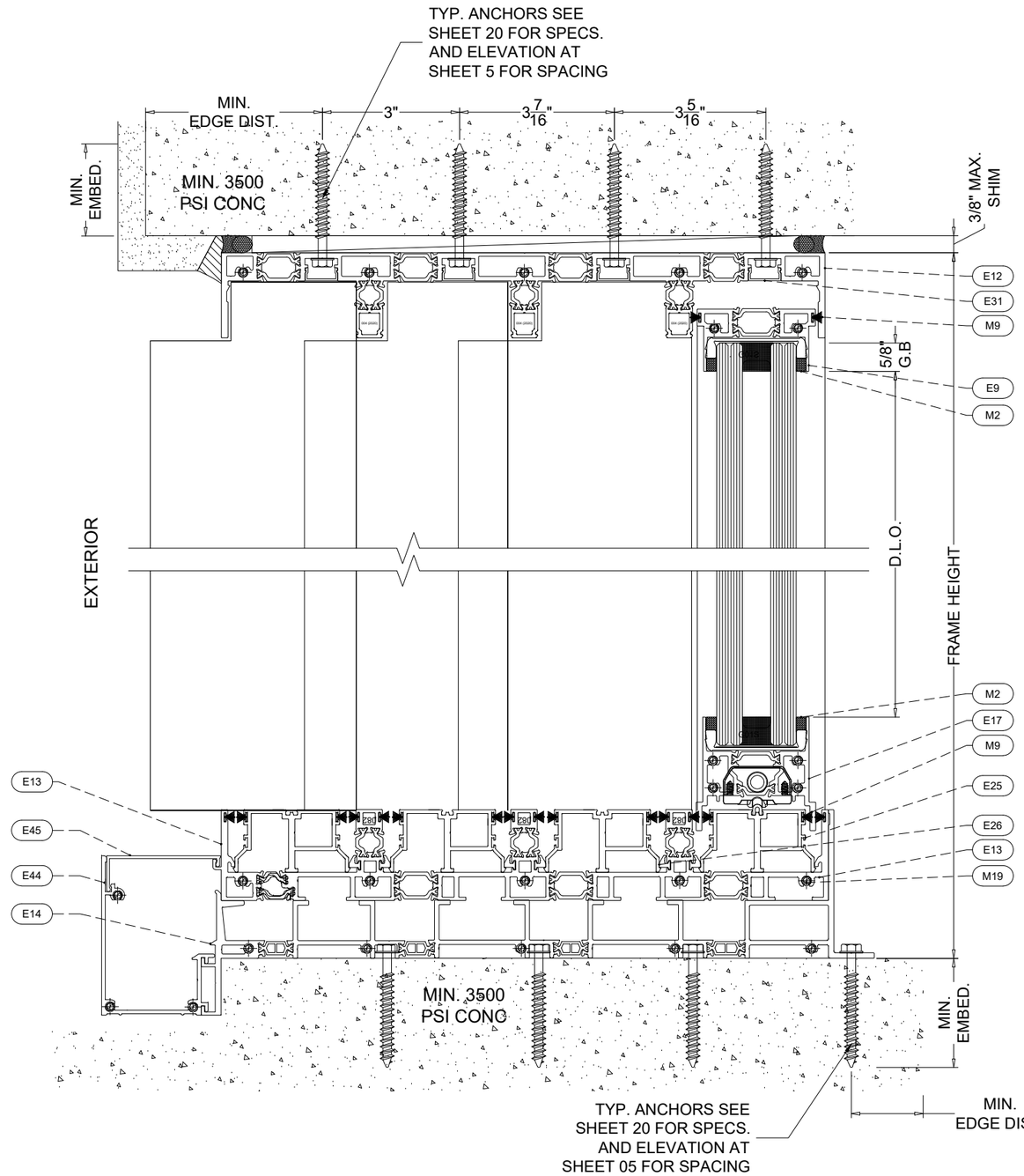
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SEALED: 06-17-2026

SEC. DETAILS

SHEET No. 16 OF 25

S30 HEAD DETAIL



S32 SILL DETAIL

4 TRACK SYSTEM

FL# 47930.2

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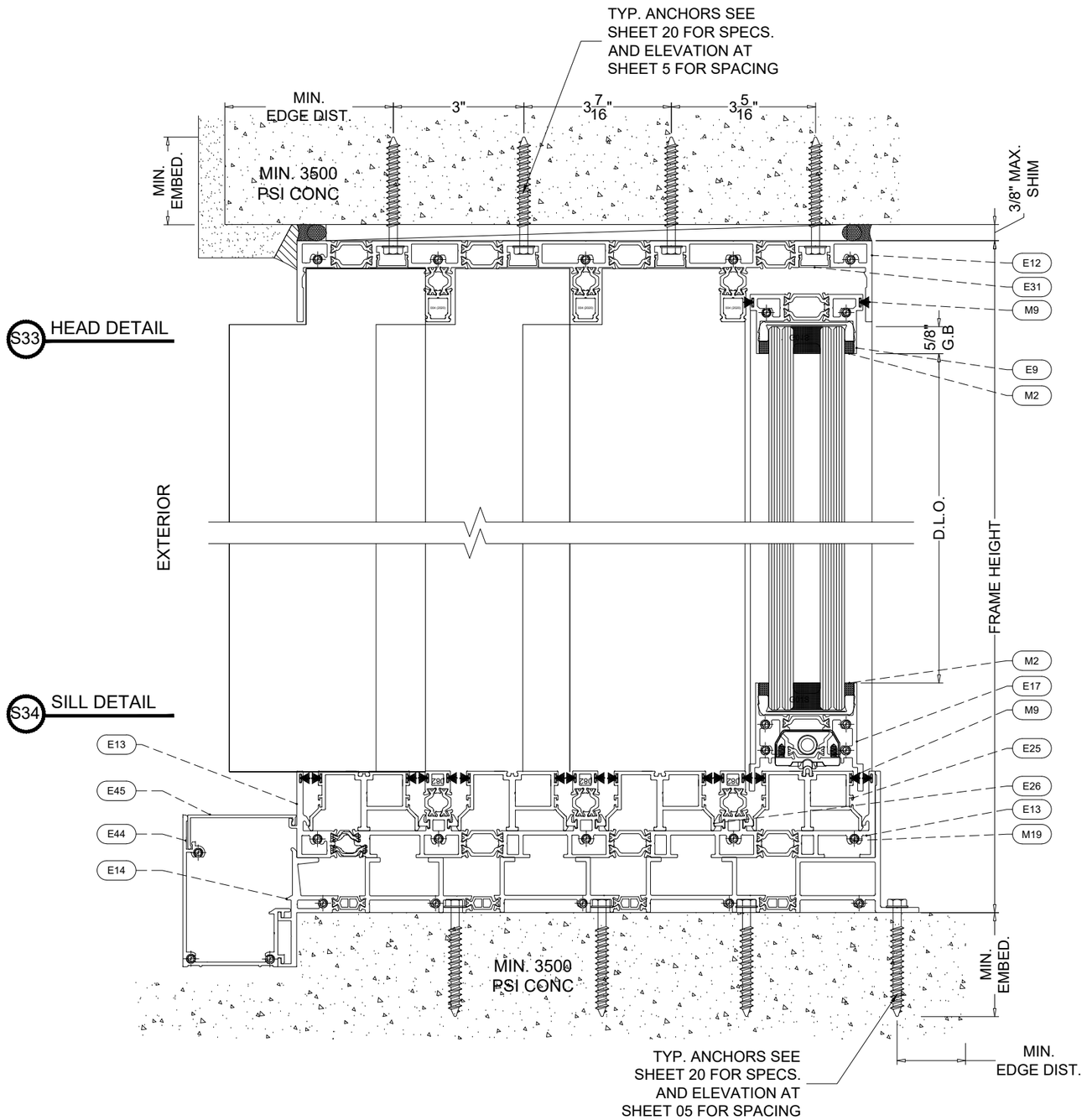
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SEC. DETAILS

SHEET No.
17 OF 25



S33 HEAD DETAIL

S34 SILL DETAIL

4 TRACK SYSTEM

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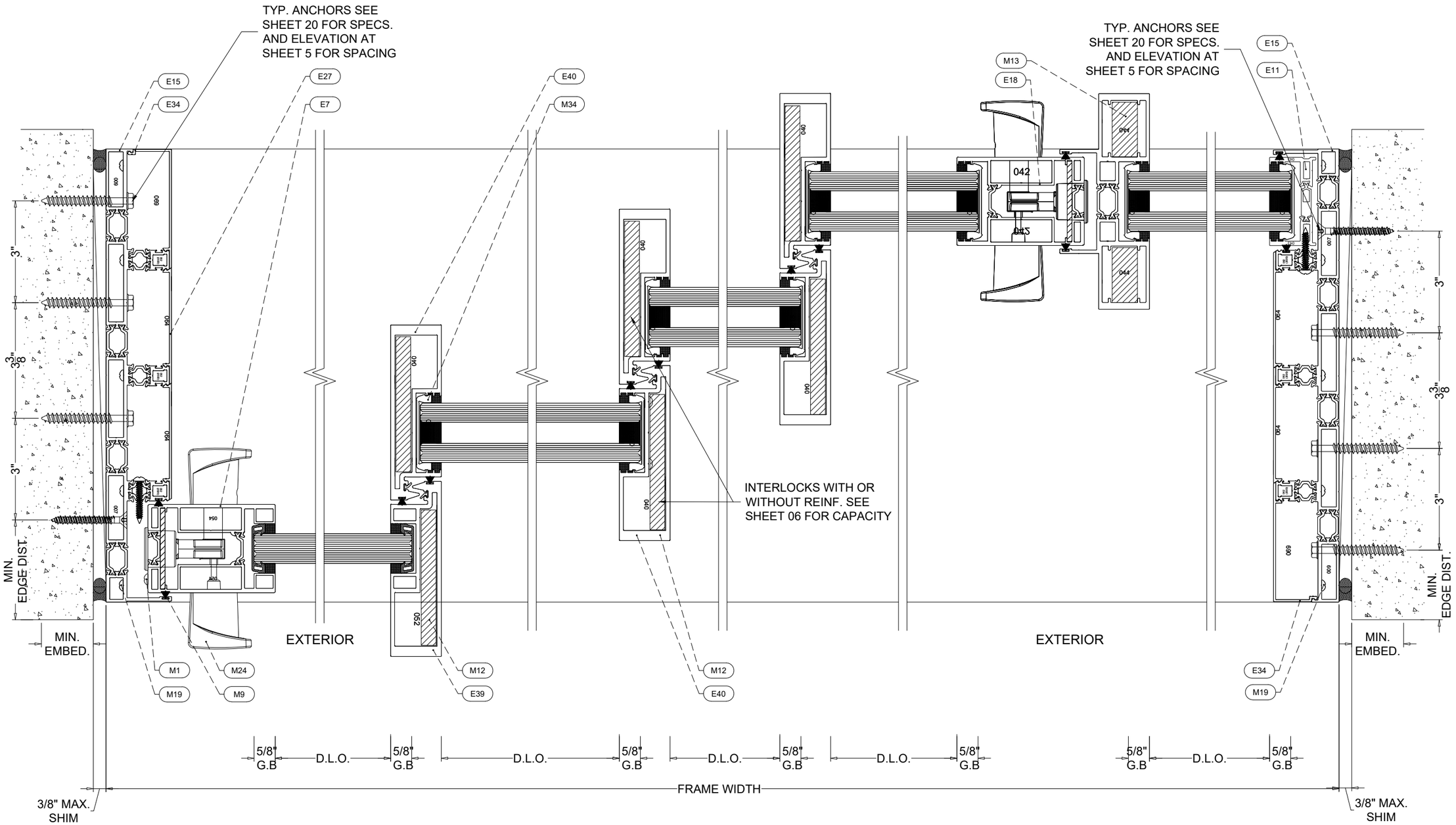
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SEC. DETAILS

SHEET No.
18 OF 25



S35 HANDLE DETAIL

S36 INTERLOCK DETAIL S37

S38 INTERLOCK DETAIL

S39 MEETING STILE

S40 JAMB DETAIL

4 TRACK SYSTEM

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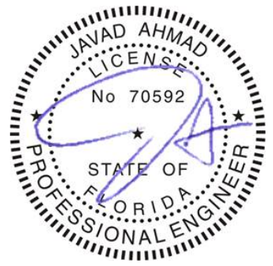
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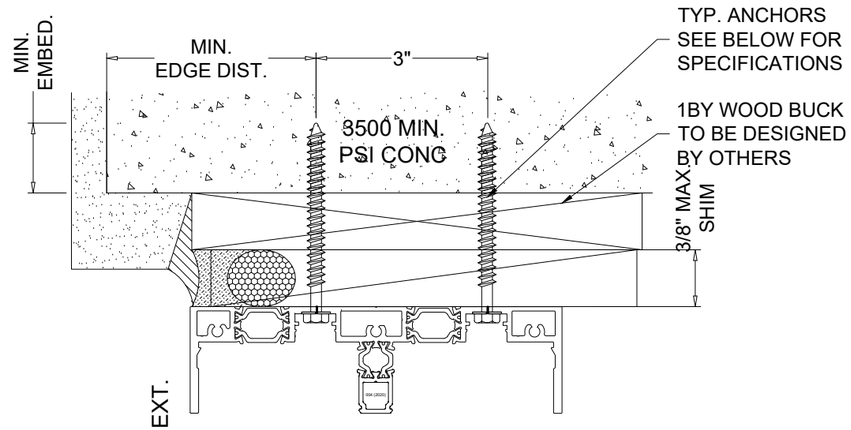
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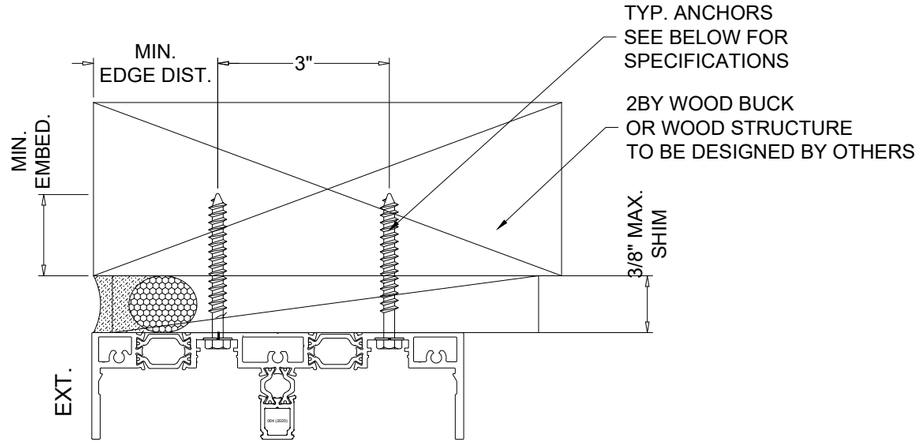


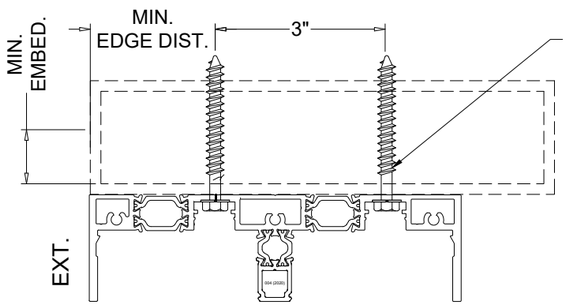
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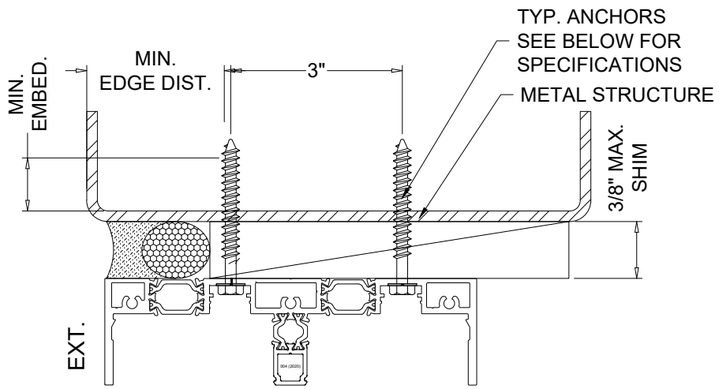
SEC. DETAILS

SHEET No. 19 OF 25









TYPICAL SUBSTRATE ANCHORS:

A

5/16" DIA ULTRACON+ BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)
THRU 1BY OR 2BY BUCKS INTO CONC. (MIN. 3500 PSI CONC.)
2" MIN. EMBED INTO CONCRETE (HEAD / SILL / JAMBS)

DIRECTLY INTO CONCRETE
2" MIN. EMBED INTO CONCRETE (MIN. 3500 PSI CONC.)
1-3/4" MIN. EMBED INTO BLOCK

ANCHOR EDGE DISTANCES
INTO CONCRETE = 3-1/8" MIN.
INTO BLOCKS = 2-1/2" MIN.

B

5/16" DIA ULTRACON+ BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)
INTO WOOD STRUCTURES (MIN. S.G. 0.55)
2" MIN. PENETRATION INTO WOOD (HEAD / SILL / JAMBS)

ANCHOR EDGE DISTANCES
INTO WOOD STRUCTURE = 1-9/16" MIN.

C

5/16" DIA. DRILL-FLEX (Fu=120 KSI, Fy=48 KSI)
INTO METAL STRUCTURES. (HEAD / SILL / JAMBS)
(3) THREAD MIN. PENETRATION BEYOND METAL SUBSTRATE
ALUMINUM: 1/8" THK. MIN. (6063-T6 MIN.)
STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCES
INTO METAL STRUCTURE = 3/4" MIN.

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REVISION

No.	DATE	BY	DESCRIPTION
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scale:	N/A
drawn by:	M.S.
check by:	
Drawing no.	JA-1445-26

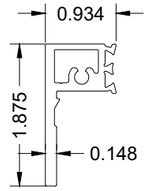
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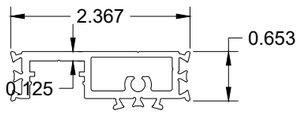
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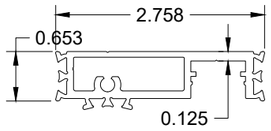
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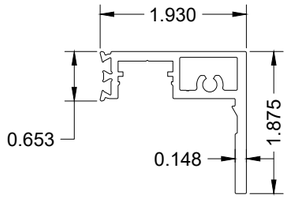
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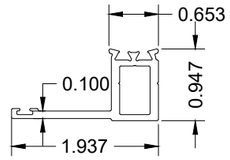
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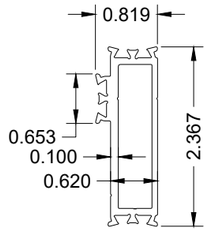
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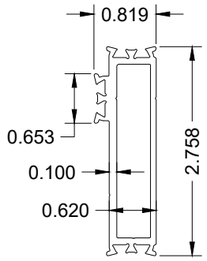
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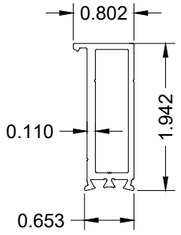


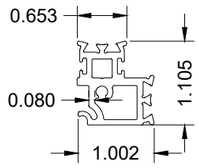
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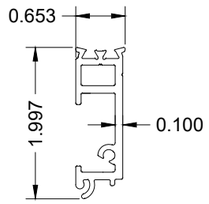


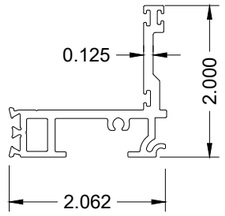
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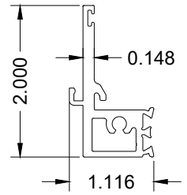


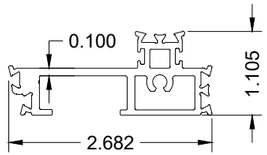












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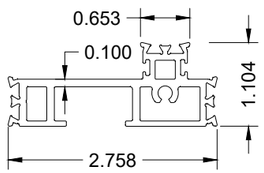
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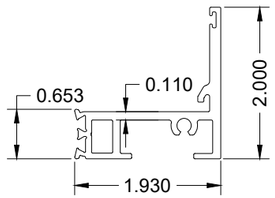
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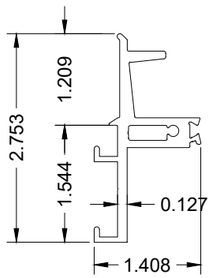
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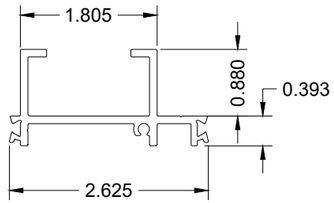
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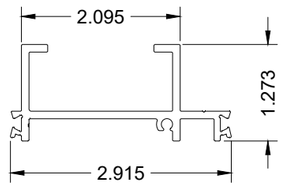
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check by:	
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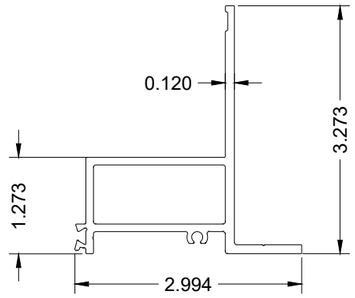
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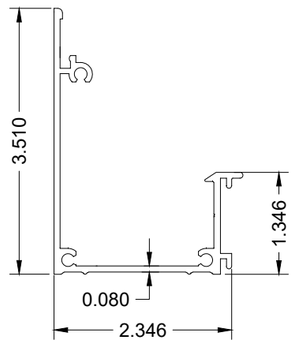
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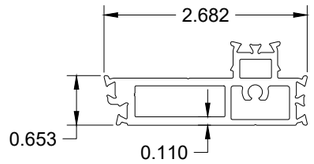
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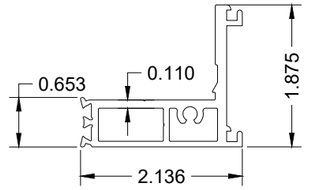
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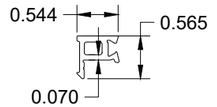
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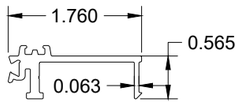
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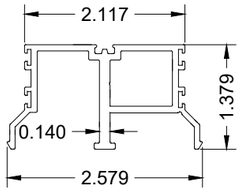
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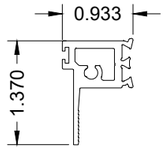
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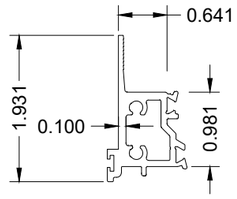
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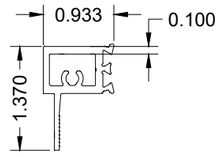
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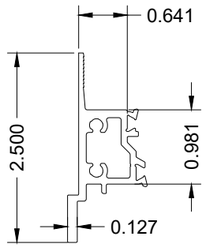
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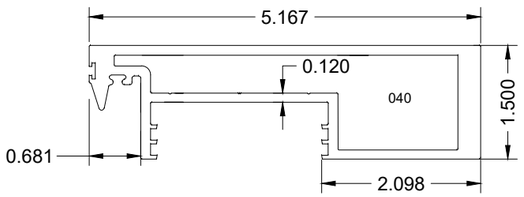
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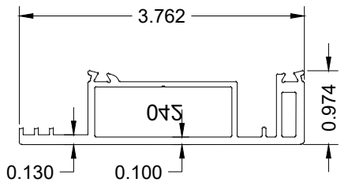
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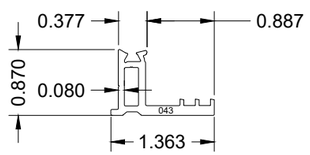
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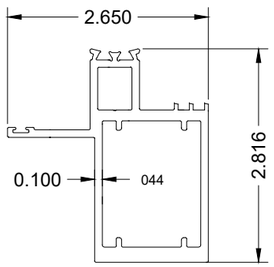
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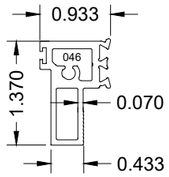
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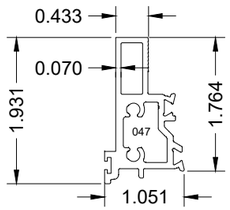
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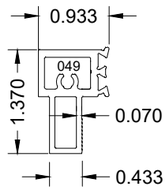
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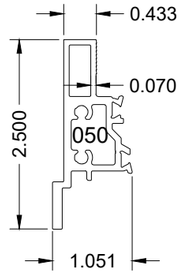
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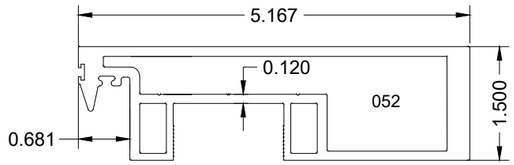
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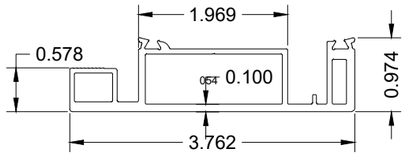
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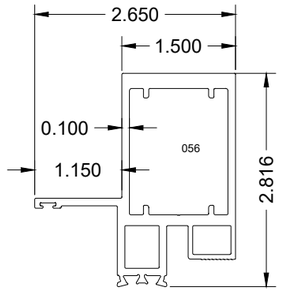
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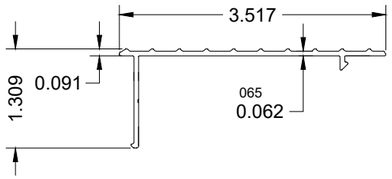
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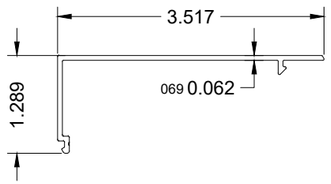
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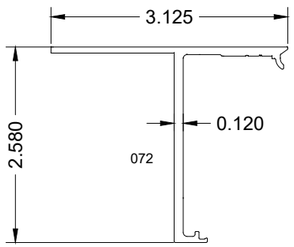
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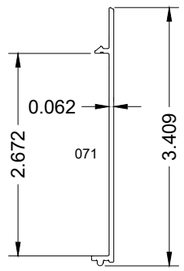
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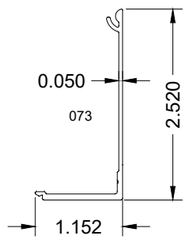
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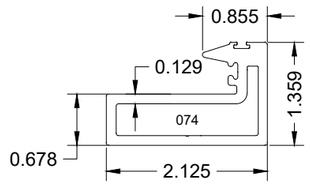
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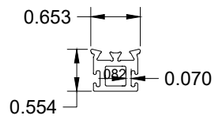
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073



074



082

FL# 47930.2

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7875 NW 12 Street, Suite 102
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CONSULTING • STRUCTURAL DESIGN • FACADES • BUILDING ENVELOPE • SYSTEM DESIGN • PRODUCT APPROVALS

PROJECT :

ES-SGD 1515T
(L.M.I & S.M.I)

CLIENT :

E.S. WINDOWS, LLC

3550 N.W. 49 STREET
MIAMI, FL 33142
TEL. (305) 638-5151
FAX. (305) 638-5158

REVISION

No.	DATE	BY	DESCRIPTION
0			

date:	6/17/2026
scale:	N/A
drawn by:	M.S.
check by:	
Drawing no.	JA-1445-26

Eng: JAVAD AHMAD, PE
CIVIL FLA. PE # 70592 – C.A.N. 34254

JAVAD AHMAD LICENSE No 70592 STATE OF FLORIDA PROFESSIONAL ENGINEER

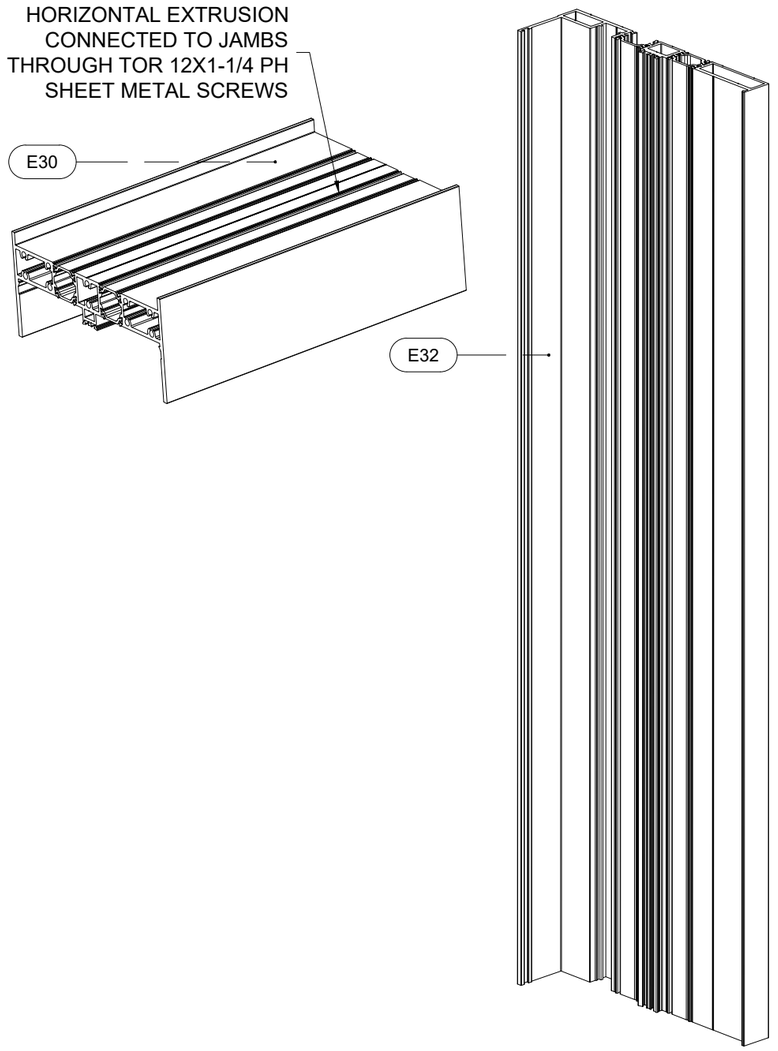
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PROFILES

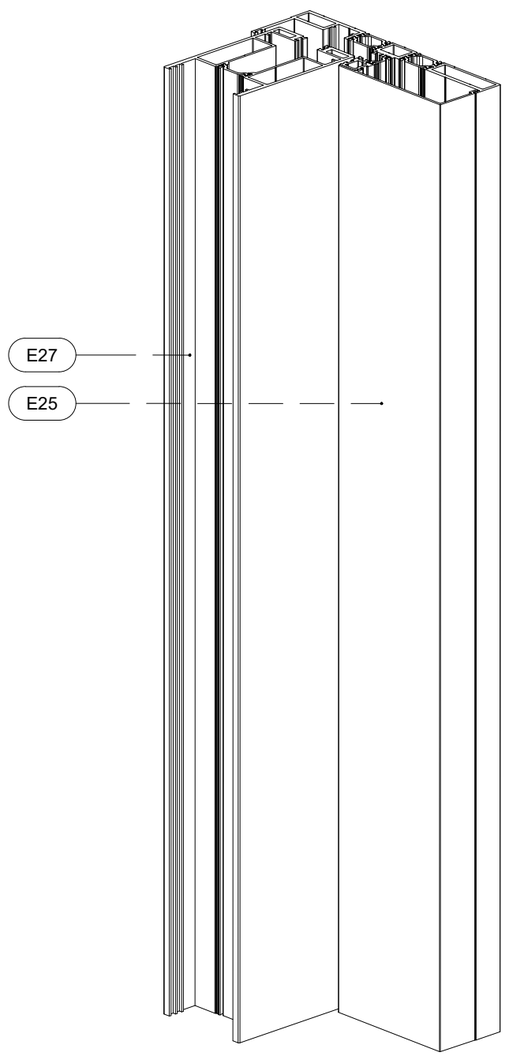
SHEET No.
23 OF 25

BILL OF MATERIALS

ITEM NO.	PART NO.	DESCRIPTION	MATERIAL
E1	ES-SGD1515T-501	FRAME HEAD (2 TRACK)	6063-T6
E2	ES-SGD1515T-506	SILL (2 TRACK)	6063-T6
E3	ES-SGD1515T-525	SILL TRACK THERMAL	6063-T6
E4	ES-SGD1515T-503	JAMB (2 TRACK)	6063-T6
E5	ES-SGD1515T-539	PANEL TOP	6063-T6
E6	ES-SGD1515T-544	PANEL BOTTOM	6005-T6
E7	ES-SGD1515T-054	LOCK STILE	6063-T6
E8	ES-SGD1515T-537	ASTRAGAL LAM.GLASS	6005-T5
E9	ES-SGD1515T-530	PANEL TOP	6063-T6
E10	ES-SGD1515T-534	LOW BOTTOM	6063-T6
E11	ES-SGD1515T-535	FIXED STILE	6063-T6
E12	ES-SGD1515T-517	HEAD (4 TRACK)	6063-T6
E13	ES-SGD1515T-519	SILL (4 TRACK)	6063-T6
E14	ES-SGD1515T-524	SUB SILL (4 TRACK)	6005-T6
E15	ES-SGD1515T-521	JAMB (4 TRACK)	6063-T6
E16	ES-SGD1515T-542	LOW BOTTOM (LAM. GLASS)	6063-T6
E17	ES-SGD1515T-532	LOW BOTTOM (CAST IN SILL & SUBSILL)	6063-T6
E18	ES-SGD1515T-536	LOCKED STILE	6063-T6
E19	ES-SGD1515T-538	ASTRAGAL	6005-T5
E20	ES-SGD1515T-511	BACK SILL / HEAD (CAST IN SILL)	6063-T6
E21	ES-SGD1515T-510	FRONT SILL L / HEAD (CAST IN SILL)	6063-T6
E22	ES-SGD1515T-516	JAMB (3 TRACK)	6063-T6
E23	ES-SGD1515T-540	TOP PANEL LAM. GLASS (CAST IN SILL)	6063-T6
E24	ES-SGD1515T-529	PANEL TOP (CAST IN SILL)	6063-T6
E25	ES-SGD1515T-032	SILL TRACK STEEL INSERT (CAST IN SILL & SUBSILL)	6063-T6
E26	ES-SGD1515T-009	SILL TRACK SNAP	6063-T6
E27	ES-SGD1515T-064	COVER MULTI TRACK	6063-T5
E28	ES-CF-001	END DAMS	6063-T5
E29	ES-SGD2020T-085	SUNSHADE SUPPORT	6063-T5
E30	ES-SGD1515T-071	JAMB COVER INTERMEDIATE LOCK	6063-T6
E31	ES6011	COVER HEAD	6063-T6
E32	ES-SGD1515T-065	SILL COVER	6063-T5
E33	ES-SGD1515T-063	HEAD COVER	6063-T5
E34	ES-SGD1515T-069	JAMB COVER	6063-T5
E35	ES-SGD1515T-072	INTERLOCK POCKET HOOK	6005-T5
E36	ES-SGD1515T-073	CONETING POCKET MULLION	6063-T5
E37	ES-SGD1515T-074	COVER POCKET MULLION	6005-T5
E38	ES-SGD1515T-032	COVER POCKET TWO TRACK	6063-T6
E39	ES-SGD1515T-052	INTERLOCK	6005-T5
E40	ES-SGD1515T-040	INTERLOCK	6005-T5
E41	BAL-P-001	PLATINE FOR MORTICE	6063-T6
E42	ES-SGD1515T-058	PLATINE STICKER JAMB	6063-T6
E43	ALU-P-588	SPLICE	6063-T6
E44	ES-SGD1515T-021	GUTTER	6063-T6
E45	ES-SGD1515T-022	COVER GUTTER	6063-T6
E46	ES-SGD2020-040	SILL RISER	6063-T6



HEAD / JAMB ASSEMBLY VIEW



SLIDING PANEL WITH JAMB

FL# 47930.2

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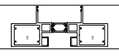
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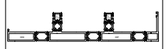
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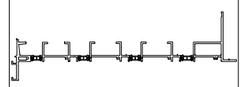
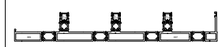
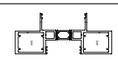
ES-SGD1515T

CODE	PART	PARTS	DETAIL	DESCRIPTION	MATERIAL	WEIGHT
		EXTRUSIONS				
E1	ES-SGD1515T-501	ES-SGD1515T-001 ES-SGD1515T-002 ES-SGD1515T-004 ES-SGD2020T-004 ENSINGER 3448 ENSINGER 2423 TECHNOFORM 270000 TECHNOFORM 279700		HEAD 2 TRACKS	6063-T6	2.276 LB/PIES 3.387 KG/M
E2	ES-SGD1515T-506	ES-SGD1515T-001 ES-SGD1515T-025 ES-SGD1515T-028 ES-SGD2020T-008 ENSINGER 3448 ENSINGER 2423 ENSINGER 2479/1673/2605 TECHNOFORM 270000 TECHNOFORM 279700 TECHNOFORM 279500		SILL 2 TRACKS WITH SILL RISER	6063-T6	2.860 LB/PIES 4.256 KG/M
E3	ES-SGD1515T-525	ES-SGD1515T-029 ES-SGD1515T-030 ENSINGER 3546 TECHNOFORM 49200/228900		SILL TRACK THERMAL	6063-T6	0.494 LB/PIES 0.735 KG/M
E4	ES-SGD1515T-503	ES-SGD1515T-006 ES-SGD1515T-007 ES-SGD1515T-009 ES-SGD2020T-062 ENSINGER 3448 ENSINGER 2423 TECHNOFORM 270000 TECHNOFORM 279700		JAMB 2 TRACK	6063-T6	1.884 LB/PIES 2.804 KG/M
E5	ES-SGD1515T-539	ES-SGD1515T-046 ENSINGER 2535 TECHNOFORM 978800		PANEL TOP	6063-T6	0.990 LB/PIES 1.473 KG/M
E6	ES-SGD1515T-544	ES-SGD1515T-047 ENSINGER 2535 TECHNOFORM 978800 ENSINGER 2479/1673/2605 TECHNOFORM 279500		PANEL BOTTOM	6063-T6	1.308 LB/PIES 1.947 KG/M
E7	ES-SGD1515T-546	ES-SGD1515T-054 ENSINGER 3448 TECHNOFORM 279700		LOCKS STILE	6063-T6	2.194 LB/PIES 3.265 KG/M
E8	ES-SGD1515T-537	ES-SGD1515T-056 ENSINGER 2535 TECHNOFORM 978800		ASTRAGAL LAM GLASS	6005-T5	3.060 LB/PIES 4.554 KG/M
E9	ES-SGD1515T-530	ES-SGD1515T-034 ENSINGER 2535 TECHNOFORM 978800		PANEL TOP	6063-T6	0.814 LB/PIES 1.211 KG/M
E10	ES-SGD1515T-534	ES-SGD1515T-035 ENISINGER 2535 TECHNOFORM 978800 ENISINGER 2479/1673/2605 TECHNOFORM 279500		LOW BOTTOM	6063-T6	1.134 LB/PIES 1.688 KG/M
E11	ES-SGD1515T-535	ES-SGD1515T-043 TECHNOFORM 516600		FIXED STILE	6063-T6	0.736 LB/PIES 1.095 KG/M
E12	ES-SGD1515T-517	ES-SGD1515T-001 ES-SGD1515T-002 ES-SGD1515T-003 ES-SGD1515T-004 ES-SGD2020T-004 ENSINGER 3448 TECHNOFORM 279700 ENSINGER 2423 TECHNOFORM 270000		HEAD 4 TRACKS (N.S & SUBSILL)	6063-T6	4.270 LB/PIES 6.355 KG/M

ES-SGD1515T

CODE	PART	PARTS	DETAIL	DESCRIPTION	MATERIAL
		EXTRUSIONS			
E22	ES-SGD1515T-516	ES-SGD1515T-009 ES-SGD1515T-008 ES-SGD1515T-007 ES-SGD1515T-006 ES-SGD2020T-062 ENSINGER 3448 TECHNOFORM 279700 ENSINGER 2423 TECHNOFORM 270000		JAMB 3 TRACKS	6063-T6
E23	ES-SGD1515T-540	ES-SGD1515T-049 ENSINGER 2535 TECHNOFORM 978800		TOP PANEL LAM.GLASS (CAST IN STILL)	6063-T6
E24	ES-SGD1515T-529	ES-SGD1515T-037 ENSINGER 2535 TECHNOFORM 978800		PANEL TOP (CAST IN STILL)	6063-T6

ES-SGD1515T

CODE	PART	PARTS	DETAIL	DESCRIPTION	MATERIAL
		EXTRUSIONS			
E13	ES-SGD1515T-519	ES-SGD1515T-013 ES-SGD1515T-014 ES-SGD1515T-015 ES-SGD1515T-016 ES-SGD2020T-082 ENSINGER 2423 TECHNOFORM 270000 ENSINGER 2479/1673/2605 TECHNOFORM 279500 ENSINGER 3448 TECHNOFORM 279700		SILL 4 TRACKS (SUB SILL)	6063-T6
E14	ES-SGD1515T-524	ES-SGD1515T-017 ES-SGD1515T-018 ES-SGD1515T-019 ES-SGD1515T-020 ENSINGER 3546 TECHNOFORM 493200/228900		SUBSILL 4 TRACKS	6063-T6
E15	ES-SGD1515T-521	ES-SGD1515T-009 ES-SGD1515T-008 ES-SGD1515T-007 ES-SGD1515T-006 ES-SGD2020T-062 ENSINGER 3448 TECHNOFORM 279700 ENSINGER 2423 TECHNOFORM 270000		JAMB 4 TRACKS	6063-T6
E16	ES-SGD1515T-542	ES-SGD1515T-050 ENSINGER 2535 TECHNOFORM 978800 ENSINGER 2479/1673/2605 TECHNOFORM 279500		LOW BOTTOM LAM.GLASS (C.I.S. & SUBSILL)	6063-T6
E17	ES-SGD1515T-532	ES-SGD1515T-038 ENSINGER 2535 TECHNOFORM 978800 ENSINGER 2479/1673/2605 TECHNOFORM 279500		LOW BOTTOM (CAST IN STILL & SUBSILL)	6063-T6
E18	ES-SGD1515T-536	ES-SGD1515T-042 ENSIGER 3448 TECHNOFORM 279700		LOCKED STILE	6063-T6
E19	ES-SGD1515T-538	ES-SGD1515T-044 ENSINGER 2535 TECHNOFORM 978800		ASTRAGAL	6005-T5
E20	ES-SGD1515T-511	ES-SGD1515T-010 ES-SGD1515T-012 ES-SGD2020T-082 ENSINGER-2423 TECHNOFORM 270000 ENSINGER 3448 TECHNOFORM 279700		BACK SILL/HEAD (CAST IN SILL)	6063-T6
E21	ES-SGD1515T-510	ES-SGD1515T-010 ES-SGD1515T-011 ES-SGD2020T-082 ENSINGER 2423 TECHNOFORM 270000 ENSINGER 3448 TECHNOFORM 279700		FRONT SILL L/HEAD (CAST IN SILL)	6063-T6

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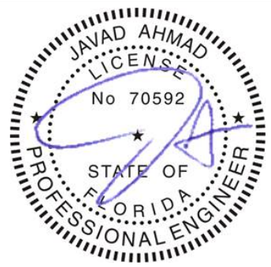
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