

CLIENT: Cosentino
355 Alhambra Circle, 10th floor
Coral Gables, FL 33134

Project No: 21-1050

Report Date: April 13, 2021

SAMPLE ID: Series: 1.2 cm Dekton Ultra Compact Facade Systems

SAMPLE DESCRIPTION: 21'-0 3/8" (252 3/8") by 9'-3 3/8" (112 3/8") high; See page 4 for full description.

SAMPLING DETAIL: The test sample manufactured by Cosentino was submitted directly to FTL by the client. Samples were independently selected for testing.

DATE OF RECEIPT: Samples were received at the FTL Miami Laboratory on January 21, 2021.

TESTING PERIOD: February 8, 2021.

TESTING LOCATION: Fenestration Testing Laboratory (FTL) – Miami, Florida, USA

AUTHORIZATION: Proposal 21AM01151, signed by Brendan Mercier, dated January 30, 2021.

TEST PROCEDURE: Testing to the following requirements:

- ASTM E330/E330M-14 Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference

TEST RESULTS: The façade systems achieved passing results found within this test report when tested in accordance with the ASTM E330/E330M for research and development.

CONTENTS: Test report pages 1 through 9.

Prepared By

Lusinda Delgado

Lusinda Delgado
Technical Report Writer

**Signed for and on behalf of
Fenestration Testing Laboratory**

Jose Sanchez

Jose Sanchez
Operation Manager

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Technician:
 Yoenis Gonzalez

Revision	Description	Effective Date
0	Initial Release	4/13/2021

Notes

* designates measurements by laboratory

** as per manufacturer

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Test loads were held for 10 seconds.

At conclusion of testing there was no visible damage to stone wall or fasteners withdrawal from the assembly.

Test specimens were covered with 1.5 mil plastic sheeting to seal from air leakage when load test were performed, however this had no effect on below results.

DESCRIPTION OF SAMPLE	
Model Designation:	Series: 1.2 cm Dekton Ultra Compact Facade Systems
Overall Size:	21'-0 3/8" (252 3/8") by 9'-3 3/8" (112 3/8") high
Number of Panels:	Four
Size of Panels:	10'-6" (126") by 4'-8" (56") high
Sample A-1	

Sample Installation
The panels were installed onto a 14-gauge steel studded wall that has a 5/8" Densglass board. One Gridwork top anchor, one Gridwork intermediate anchor and one Gridwork starter J anchor located horizontally, spaced 26" on center and fastened using a single row of No. 14 by 3" HWH SDS at the top and starter anchors, and a double row at the intermediate anchor. The panels engage onto the Gridwork anchors using Gridwork Mechanical Kerf Anchor. The Gridwork Kirk anchor was located horizontally behind each panel and fastened using a single row of "Keil 555020830 undercut fasteners with locking plate spaced 2 1/16", 26 1/16", 74 1/8", 98 1/8" and 122" from left of each panel.

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		15.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.086"	0.008"	Passed	
2	0.140"	0.012"	Passed	
3	0.131"	0.010"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		30.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.128"	0.012"	Passed	
2	0.198"	0.018"	Passed	
3	0.205"	0.022"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		45.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.136"	0.016"	Passed	
2	0.226"	0.025"	Passed	
3	0.241"	0.031"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		60.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.168"	0.025"	Passed	
2	0.280"	0.036"	Passed	
3	0.319"	0.042"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		75.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.226"	0.029"	Passed	
2	0.342"	0.044"	Passed	
3	0.368"	0.052"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		90.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.286"	0.033"	Passed	
2	0.404"	0.049"	Passed	
3	0.442"	0.056"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		105.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.358"	0.037"	Passed	
2	0.468"	0.060"	Passed	
3	0.490"	0.068"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		120.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.398"	0.045"	Passed	
2	0.498"	0.072"	Passed	
3	0.536"	0.079"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		135.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.436"	0.051"	Passed	
2	0.538"	0.078"	Passed	
3	0.569"	0.086"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		150.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.459"	0.058"	Passed	
2	0.586"	0.086"	Passed	
3	0.599"	0.095"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		180.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.477"	0.063"	Passed	
2	0.605"	0.095"	Passed	
3	0.642"	0.099"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		210.0 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.495"	0.069"	Passed	
2	0.633"	0.102"	Passed	
3	0.658"	0.106"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		15.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.118"	0.018"	Passed	
2	0.168"	0.026"	Passed	
3	0.170"	0.028"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		30.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.181"	0.025"	Passed	
2	0.205"	0.029"	Passed	
3	0.231"	0.038"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		45.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.206"	0.028"	Passed	
2	0.238"	0.035"	Passed	
3	0.249"	0.042"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		60.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.238"	0.033"	Passed	
2	0.286"	0.041"	Passed	
3	0.311"	0.048"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		75.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.256"	0.036"	Passed	
2	0.308"	0.045"	Passed	
3	0.326"	0.052"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		90.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.270"	0.039"	Passed	
2	0.346"	0.056"	Passed	
3	0.358"	0.069"	Passed	

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Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		105.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.289"	0.046"	Passed	
2	0.368"	0.068"	Passed	
3	0.390"	0.075"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		120.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.308"	0.053"	Passed	
2	0.406"	0.086"	Passed	
3	0.422"	0.095"	Passed	

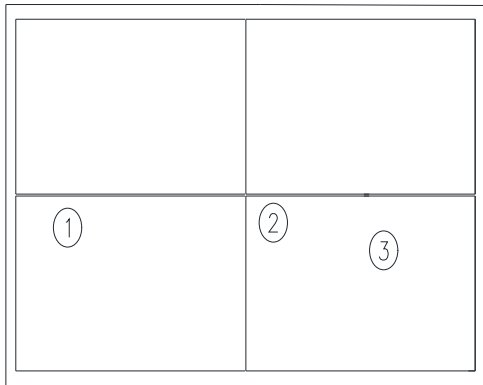
Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		135.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.368"	0.062"	Passed	
2	0.465"	0.091"	Passed	
3	0.491"	0.102"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		150.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.386"	0.069"	Passed	
2	0.489"	0.115"	Passed	
3	0.526"	0.119"	Passed	

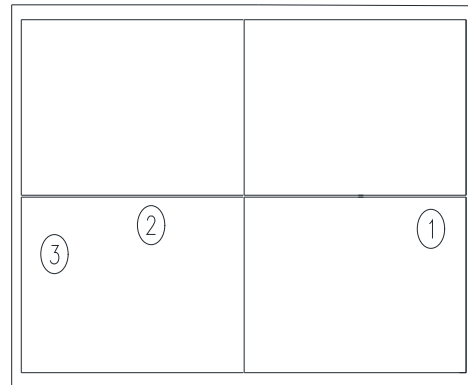
Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		180.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.411"	0.076"	Passed	
2	0.521"	0.130"	Passed	
3	0.560"	0.136"	Passed	

Sample: A-1	Temperature:	75.4°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Negative Load		210.0 psf		
see appendix B				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.438"	0.086"	Passed	
2	0.615"	0.138"	Passed	
3	0.629"	0.142"	Passed	

Appendix A




Appendix B



DEKTON NOA TEST

-

STONE SHOP DRAWINGS
100% SET FOR REVIEW
SUBMITTAL #1 - SEPTEMBER 25, 2017
SUBMITTAL #2 - NOVEMBER 13, 2017

	FENESTRATION TESTING LABORATORY INC.
	LABORATORY NUMBER: 12555
	DATE: 4/13/2021
	DRAWINGS VERIFIED BY: LD

SHEET	DESCRIPTION
ST0.00	COVER PAGE
ST1.00	SPECIFICATION SHEET
ST2.00~ST2.05	ELEVATIONS, WALL SECTIONS, AND PLAN VIEWS
ST3.00~ST3.01	GRIDWORX RAIN SCREEN SECTION DETAILS
ST4.00~ST4.02	GRIDWORX RAIN SCREEN PLAN DETAILS

SPECIFICATIONS:

GRIDWORX FAMILY OF ANCHORS:
ALUMINUM ALLOY EXTRUSIONS WITH A COMPOSITION OF 6005 ALLOW WITH A T5 TEMPER. CHANNELS PROVIDED IN TWELVE FOOT (12') LENGTHS. "L BRACKETS" ARE SPECIFIED IN LENGTH BY THE CURTAIN WALL ENGINEER AND SET AT 1/4 POINTS OF PANEL WIDTH. ALUMINUM COMPONENTS OF THE GRIDWORX SYSTEM ARE ANODIZED WITH A CLEAR COAT OR WITH COLORED FINISHES OF AA M12C22A21 MEETING THE STANDARDS OF AAMA 611-98.

FASTENERS:

- **STEEL STUDS:**
ELCO DRILL-FLEX OR HILTI KWIK-FLEX FASTENERS, #12 x 2" SELF DRILLING STRUCTURAL FASTENERS - SAE J 429 / GRADE 5 WITH A STALGARD COATING. INSTALLATION TO BE ON STUDS WITH MINIMUM OF 18 GAUGE SET ON 12" CENTERS.
- **CMU OR CONCRETE:**
ELCO AGGRE-GATOR 300 SERIES STAINLESS STEEL THREADED CONCRETE ANCHOR, HEX HEAD, #12 x 2 1/4". INSTALLATION OF FASTENERS FOR THE "INTERMEDIATE T" TO BE ON 16" CENTERS WITH TOP AND BOTTOM SCREW TO ALTERNATE SO AS TO NOT HAVE BOTH INVADING THE SAME CAVITY OF THE CMU BLOCK. "TOP J AND STARTER J" TO BE INSTALLED ON 16" CENTERS.
- **WOOD STUDS:**
STAINLESS STEEL 300, HEX HEAD, #12 x 2". TO BE INSTALLED ON 2" x 6" STUDS SET ON 16" CENTERS.

SHIMS:

FULL BEARING HI-IMPACT RESISTANT PLASTIC OF 3" VERTICAL OR GREATER.

SEALANT:

DOW CORNING 790 SILICONE (OR EQUAL) WITH 3/8" OPEN CELL BACKER ROD.

FLASHING:

- HOHMANN & BARNARD, INC. X-SEAL TAPE ADHESIVE (OR EQUAL)
APPLIED CONTINUOUSLY BEHIND ANCHOR ONTO SHEATHING?WATEPROOF MEMBRANE TO CREATE WATERTIGHT SEAL AROUND FASTENERS.
- METAL AND/OR ASPHALT FLASHING.
MATERIAL PROVIDED BY OTHERS FOR INTER-STORY, CASEMENT, BASE, AND OTHER RELEVANT FLASHING APPLICATIONS.

ABBREVIATIONS:

- F.O.S = FACE OF STONE
- F.O.GL = FACE OF GLASS
- E.O.S. = EDGE OF STONE
- G.L. = GRID LINE
- JT. = JOINT

ITEM #: F205
GRIDWORX 1/4" X 2-1/2" GRADE 5 STEEL FASTENER
FINISH: STALGARD COATING
MATERIAL: N/A

ISOMETRIC

PART # 3571820700750
SPAX 1/4" X 3" POWER LAG
FINISH: HCR COATING
MATERIAL: N/A

PART # 555 020 830
KEIL UNDERCUT ANCHOR
FINISH: N/A
MATERIAL: A4 STAINLESS STEEL

ISOMETRIC

PART #
GRIDWORX 5/16" 18-8 PITCH ADJUSTMENT BOLT
FINISH: BLACK FINISH
MATERIAL: STAINLESS STEEL

PART #
GRIDWORX 5/16" -18 THREAD PITCH ADJUSTMENT NUT
FINISH: N/A
MATERIAL: STAINLESS STEEL

PART #S C100 1/16", C101 1/8", C102 1/4"
FULL BEARING PLASTIC SHIM
FINISH: N/A
MATERIAL: HI-IMPACT PLASTIC

ITEM# 003
GRIDWORX TOP ANCHOR
FINISH: CLEAR ANODIZED
MATERIAL: 6005 T5 ALUMINUM

ISOMETRIC

ITEM# 002
GRIDWORX INTERMEDIATE ANCHOR
FINISH: CLEAR ANODIZED
MATERIAL: 6005 T5 ALUMINUM

ISOMETRIC

ITEM# 001
GRIDWORX STARTER J ANCHOR
FINISH: CLEAR ANODIZED
MATERIAL: 6005 T5 ALUMINUM

ISOMETRIC

PART #
GRIDWORX 16 GAUGE FORMED ALUMINUM ANGLE
FINISH: G-90 COATING
MATERIAL: 6005 T5 ALUMINUM

ITEM #: 560
GRIDWORX MECHANICAL KERF ANCHOR
FINISH: CLEAR ANODIZED
MATERIAL: 6005 T5 ALUMINUM

ISOMETRIC

ITEM #: 565
GRIDWORX MECHANICAL KERF LOCKING PLATE
FINISH: CLEAR ANODIZED
MATERIAL: 6005 T5 ALUMINUM

ISOMETRIC

FENESTRATION TESTING LABORATORY INC.

LABORATORY NUMBER: 12555

DATE: 4/13/2021

DRAWINGS VERIFIED BY: LD

DRAWN BY:

PRECISION WALL SYSTEMS
10980 ALDER CIRCLE
DALLAS, TEXAS 75238

TEL: 214.774.4502
FAX: 214.432.5963

ARCHITECT:
N/A

PRECISION WALL SYSTEMS

10980 ALDER CIR. DALLAS, TX 75238

SHOP DRAWINGS

DATE:

NOTES:

TITLE:

SECTION DETAILS

SHEET:

ST1.00

DRAWN BY:



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DALLAS, TEXAS 75238

TEL: 214.774.4502
FAX: 214.432.5963

ARCHITECT:
N/A

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SHOP DRAWINGS

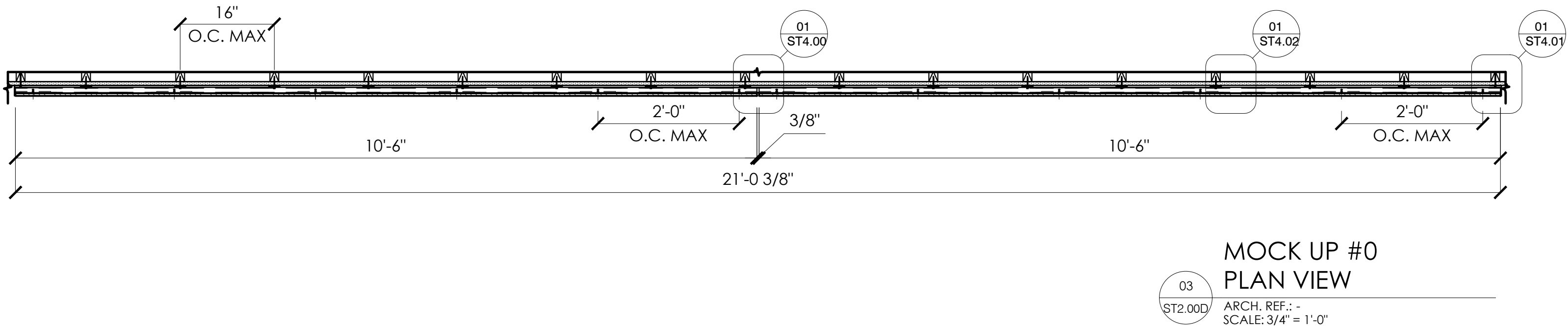
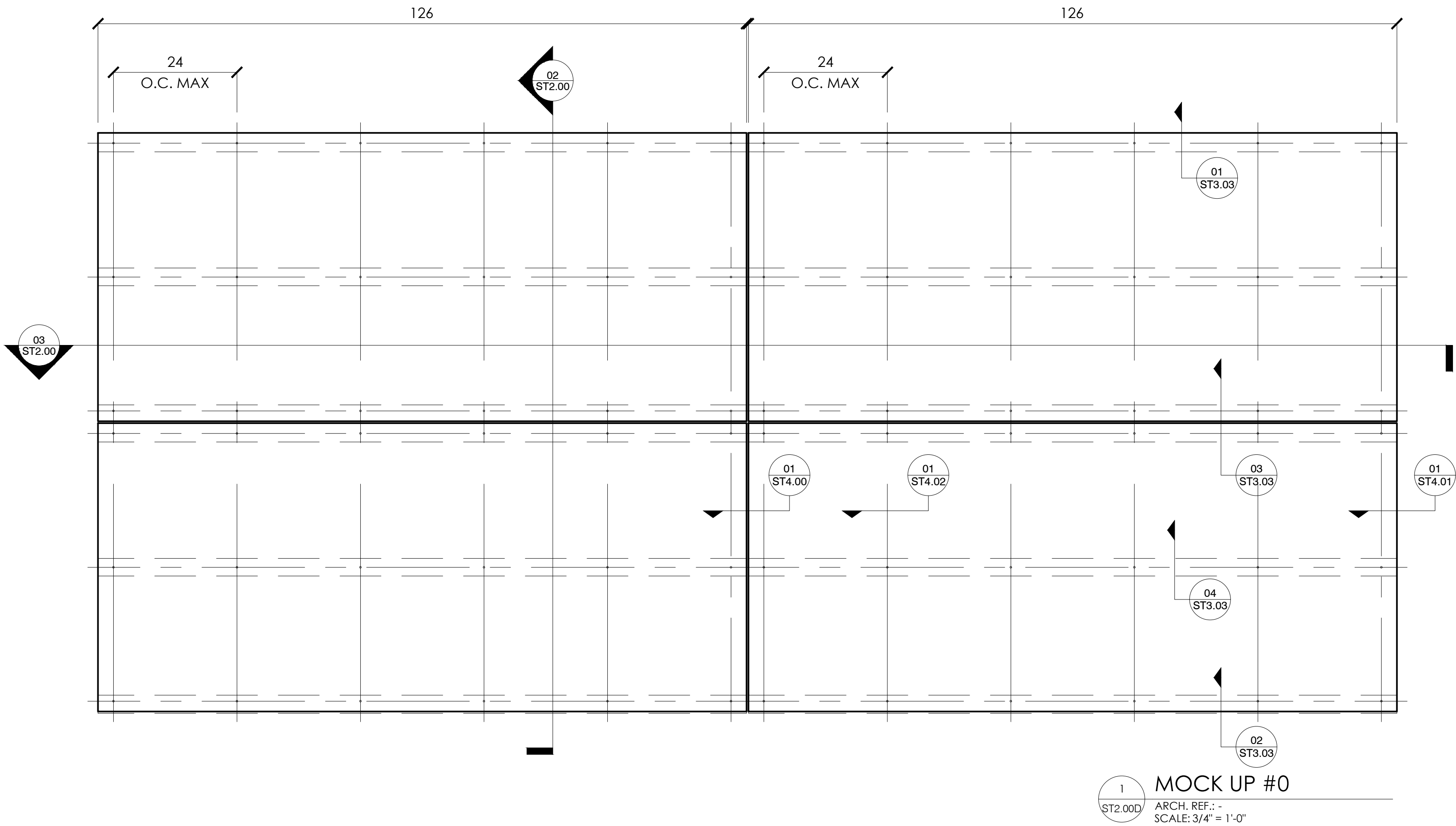
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NOTES:

TITLE:
ELEVATIONS,
SECTION, AND PLANS

SHEET:

ST2.00D






FENESTRATION TESTING LABORATORY INC.

LABORATORY NUMBER: 12555

DATE: 4/13/2021

DRAWINGS VERIFIED BY: LD

TESTS:
UNIFORM LOAD (TAS 202) (LOADS ONLY)
CYCLIC LOAD (TAS 203)
SEE FLOWCHART FOR PRESSURES

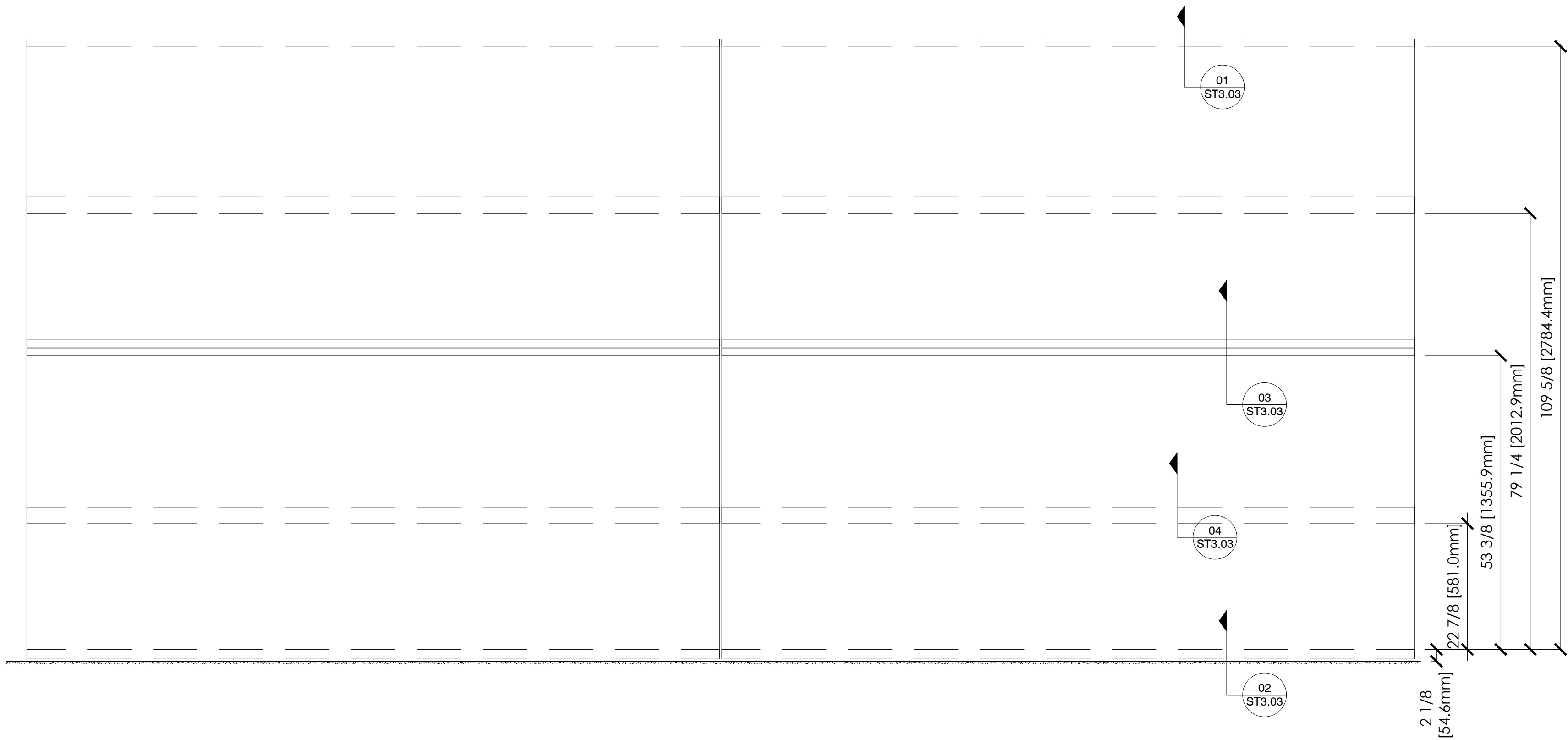


FENESTRATION TESTING LABORATORY INC.

LABORATORY NUMBER: 12555

DATE: 4/13/2021

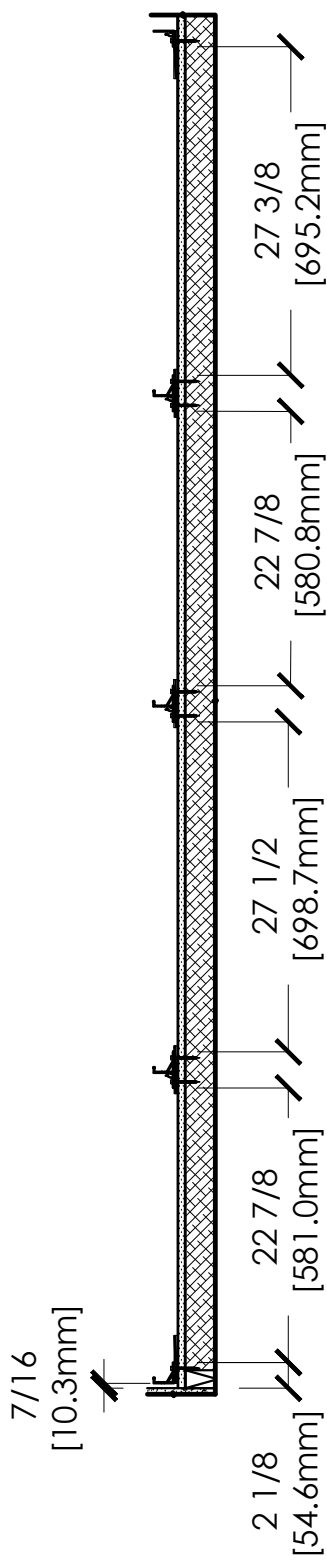
DRAWINGS VERIFIED BY: LD



1

MOCK UP #0

ARCH. REF.: -
SCALE: 3/4" = 1'-0"



2

MOCK UP #0
SECTION VIEW

ARCH. REF.: -
SCALE: 3/4" = 1'-0"

TESTS:
UNIFORM LOAD (TAS 202) (LOADS ONLY)
CYCLIC LOAD (TAS 203)
SEE FLOWCHART FOR PRESSURES

DRAWN BY:



PRECISION WALL SYSTEMS
10980 ALDER CIRCLE
DALLAS, TEXAS 75238

TEL: 214.774.4502
FAX: 214.432.5963

ARCHITECT:
N/A

PRECISION WALL SYSTEMS
10980 ALDER CIR. DALLAS, TX 75238

SHOP DRAWINGS

DATE:

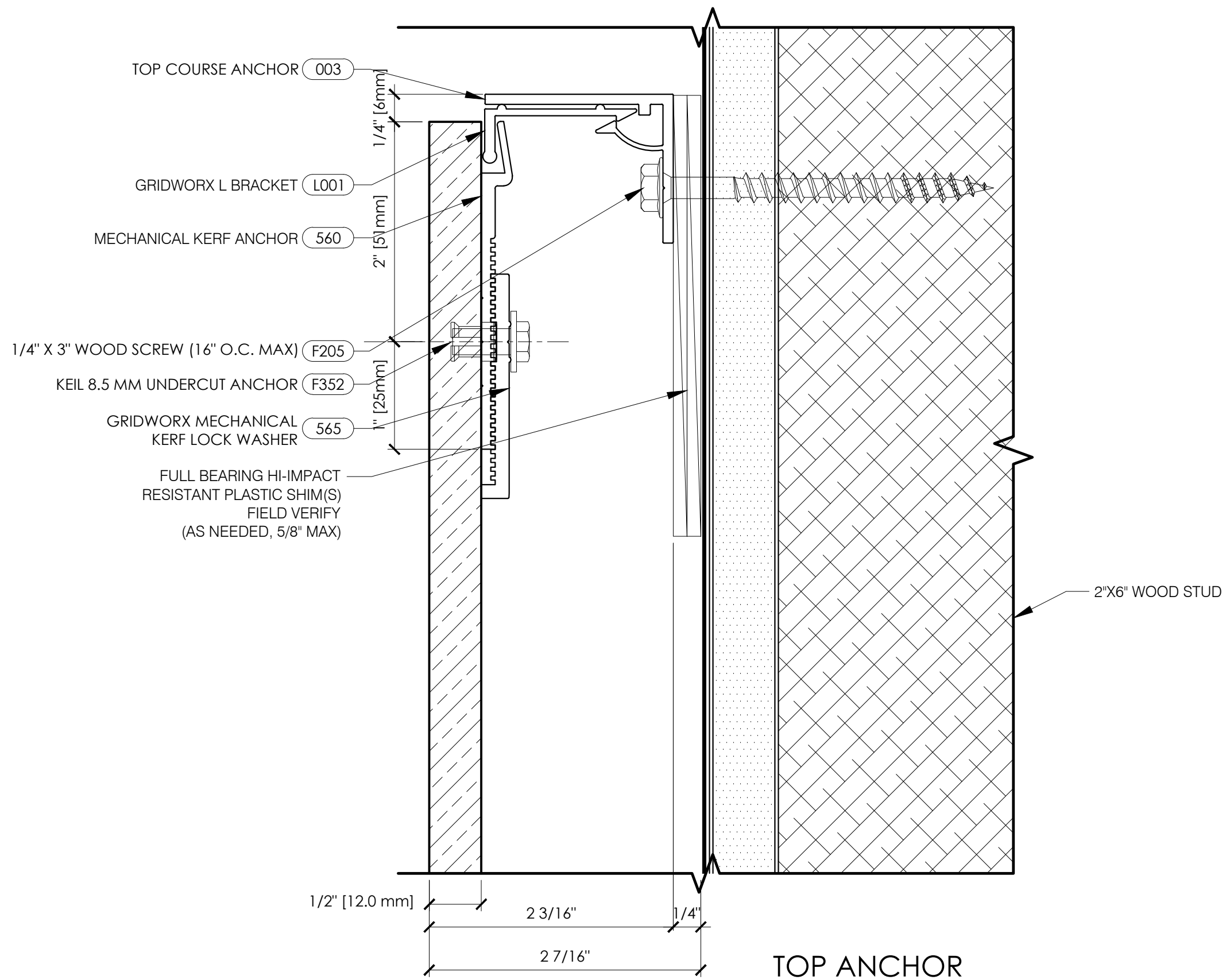
NOTES:

TITLE:

ELEVATIONS,
SECTION, AND PLANS

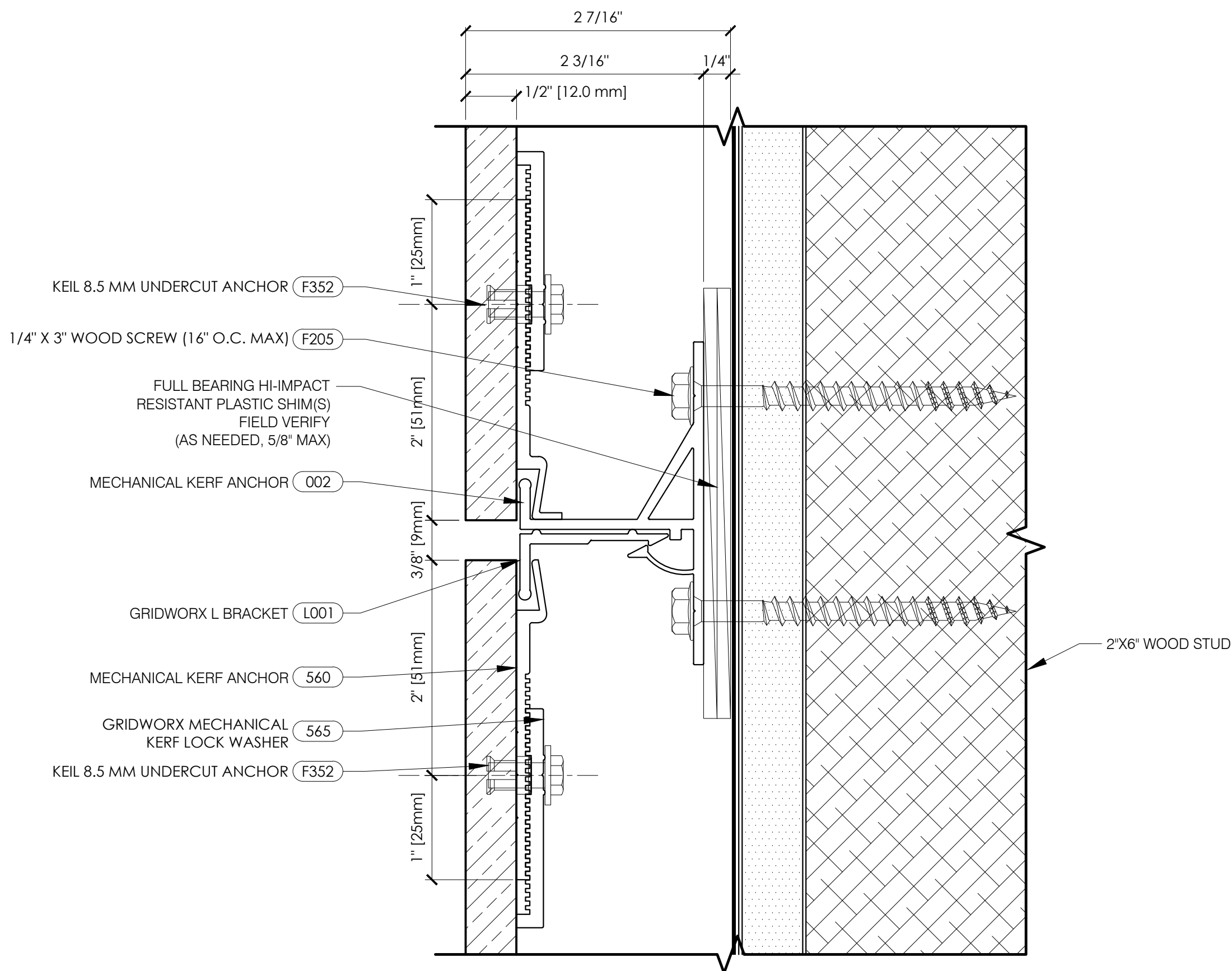
SHEET:

ST2.00DA



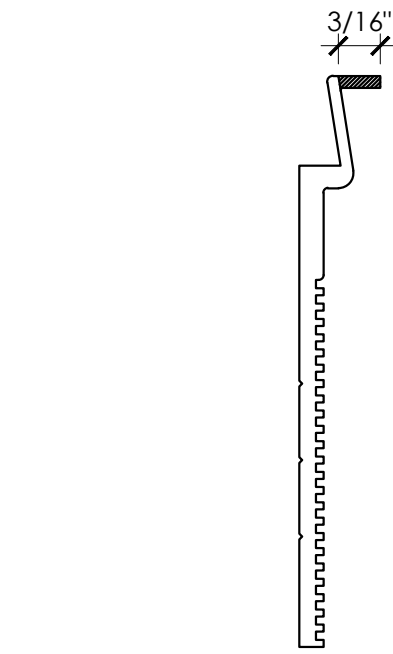
01
ST3.03
ARCH. REF.: N/A
SCALE: 1'-0" = 1'-0"

TOP ANCHOR
WITH WOOD SUBSTRATE



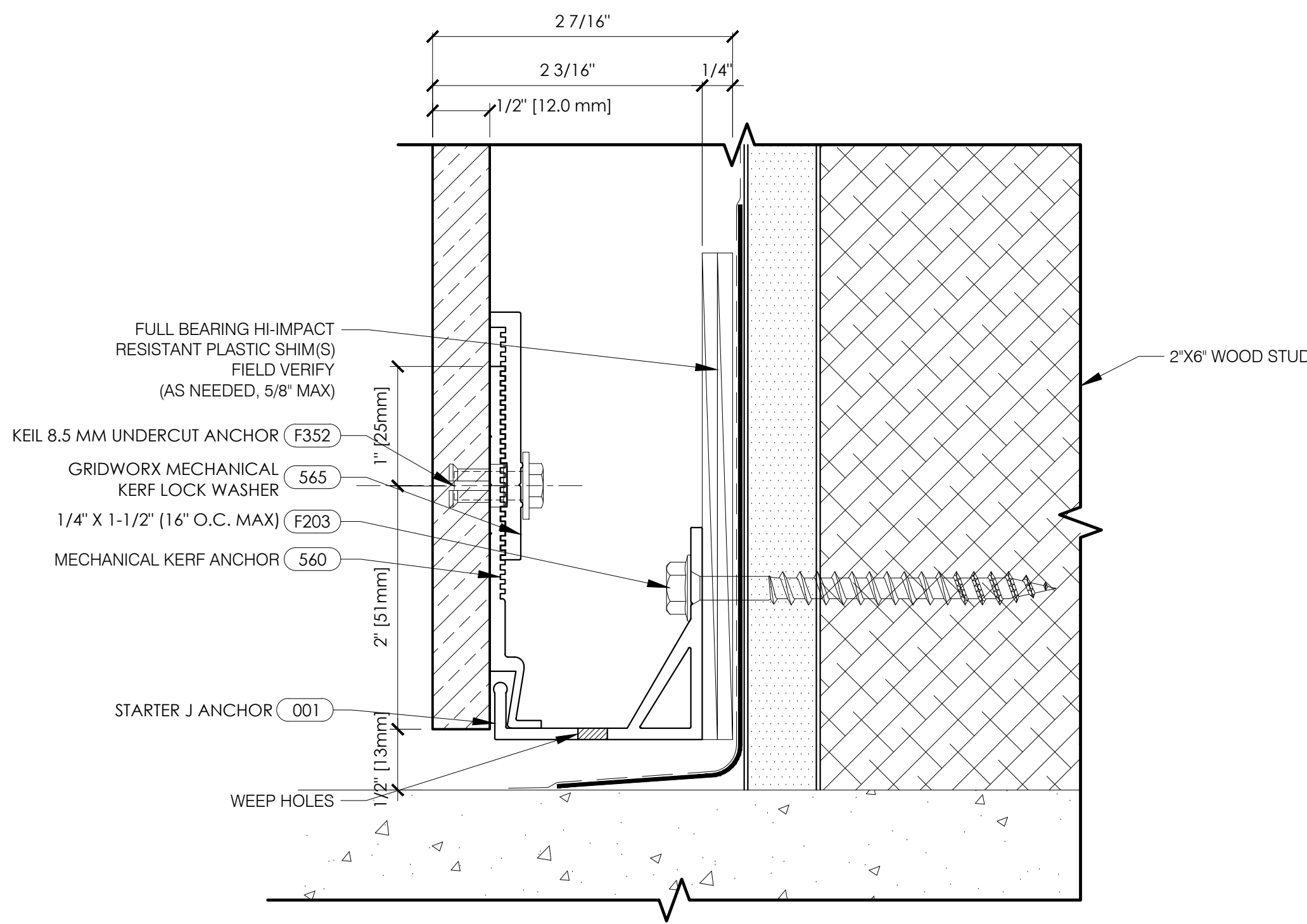
03
ST3.03
ARCH. REF.: N/A
SCALE: 1'-0" = 1'-0"

INTERMEDIATE SUPPORT
WITH WOOD SUBSTRATE



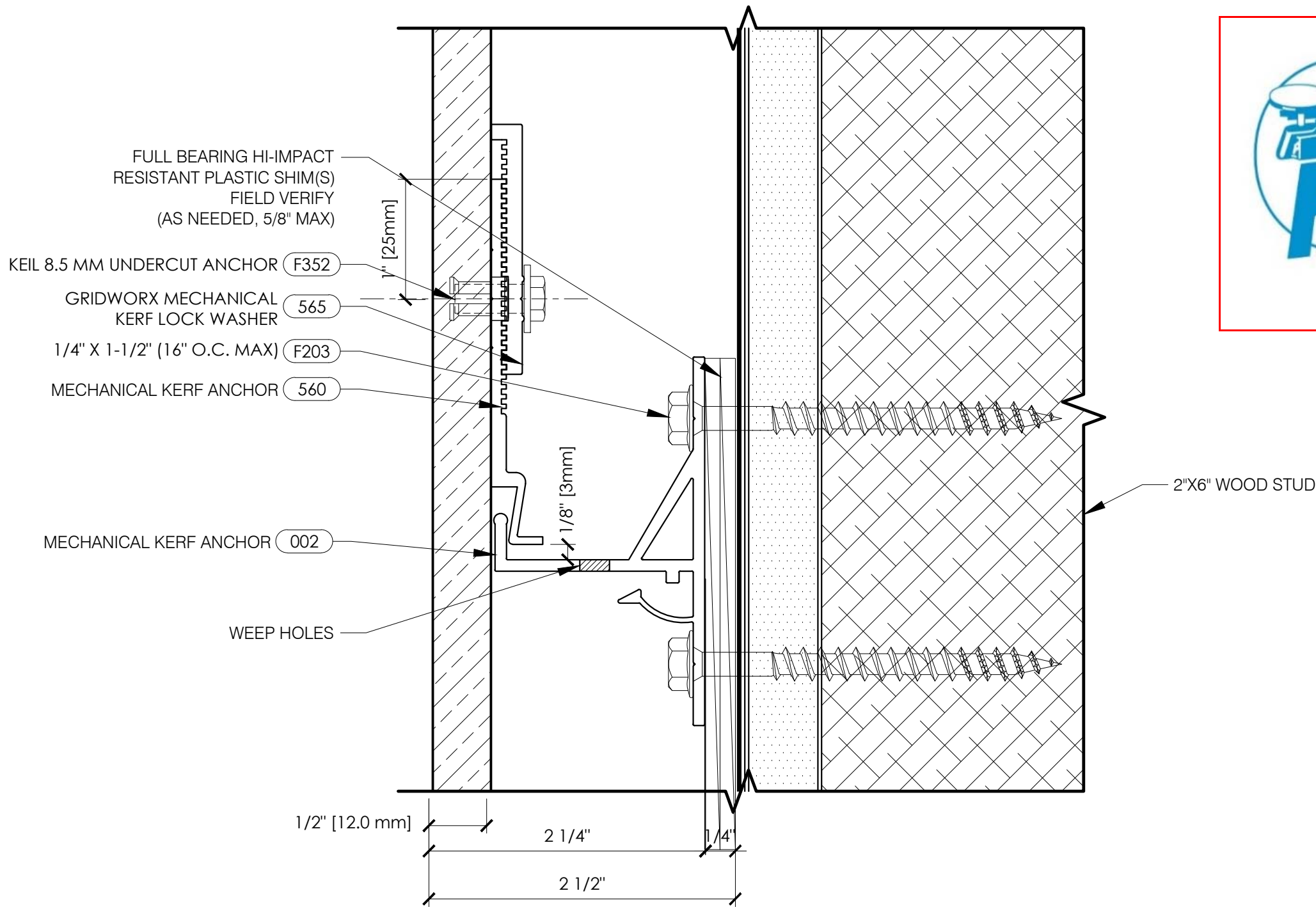
05
ST3.03
ARCH. REF.: N/A
SCALE: 1'-0" = 1'-0"

MECHANICAL KERF
MODIFICATION



02
ST3.03
ARCH. REF.: N/A
SCALE: 1'-0" = 1'-0"

BOTTOM ANCHOR
WITH WOOD SUBSTRATE



04
ST3.03
ARCH. REF.: N/A
SCALE: 1'-0" = 1'-0"

INTERMEDIATE SUPPORT
WITH WOOD SUBSTRATE



FENESTRATION TESTING LABORATORY INC.

LABORATORY NUMBER: 12555

DATE: 4/13/2021

DRAWINGS VERIFIED BY: LD

DRAWN BY:



PRECISION WALL SYSTEMS
10980 ALDER CIRCLE
DALLAS, TEXAS 75238

TEL: 214.774.4502
FAX: 214.432.5963

ARCHITECT:
N/A

PRECISION WALL SYSTEMS
10980 ALDER CIR. DALLAS, TX 75238

SHOP DRAWINGS

DATE:

NOTES:

TITLE:

SECTION DETAILS

SHEET:

ST3.03