

*Platinum Advanced Technologies,  
Inc*

**PRODUCT EVALUATION REPORT**

*Ultimate Series Foam-filled Metal Stud Wall*

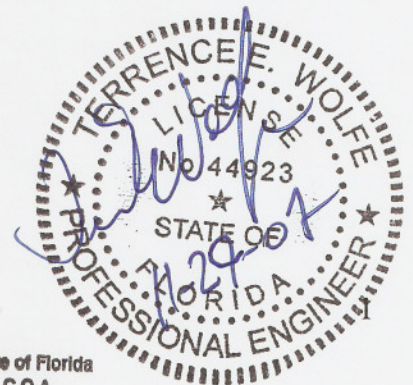
**IMPACT TESTED PER TAS 201**

Evaluator:

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**Reference: 9B-72.130(2), F.A.C.****MANUFACTURER:**

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 5999 Central Ave.  
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**STATEMENT OF COMPLIANCE WITH THE FOLLOWING CODE CRITERIA:**

Florida Building Code 2004:  
 Chapter 1: Section 104.11.2  
 Chapter 14: Exterior Walls  
 Chapter 16: Structural Loads  
 Chapter 17: Section 1711  
 Chapter 22: Steel  
 Chapter 26: Plastic

**PRODUCT DESCRIPTION:**

Panels are assembled in 48" Wide x 120" Height x 3.5" or 5.5" thick foamed filled metal stud units. The support framing is constructed from 20 Ga. (.0329") galvanized steel c-channel studs. Each stud is secured to a 20 Ga. galvanized steel c-channel top & bottom plate w/ two 0.187" diameter by 0.315" long rivets with head diameter of 0.375" at the top and at the bottom (4 total). The studs were placed @ 16" O.C. spacing. The space between the studs is filled with polyurethane foam (Elastopor 17226R by BASF) and a fiberglass fabric (Fabric DB 170S by OC-CSB-Fabrics) is laminated on both interior and exterior surfaces.

**TECHNICAL DOCUMENTATION SUPPORTING COMPLIANCE STATEMENT****A. DETAILS****B. STRUCTURAL TESTING:**

- a) **Test Report #63529.01-801-32, dated 06-06-06, by Architectural Testing.**
  - 1. ASTM E 72-04
    - A. Compressive Loading = 6752.7 lbs per 4' panel
    - B. Racking Loading = 3869 lbs per (2) 4' panels
  - 2. TAS 201 Missile Impact Testing
    - A. Results - Passed
- b) **Test Report #67472.01-801-32, dated 11-13-06, by Architectural Testing.**
  - 3. ASTM E 72-04
    - A. Compressive Loading = 11,494 lbs per 4' panel
    - B. Racking Loading = 3253 lbs per (2) 4' panels
    - C. Transverse Loading = 103 psf (48" x 120" x 5.5")
    - D. Header Deflection Test (Compressive Loading Modified)
- c) **Test Report #254-0374T-07, dated 10-31-07, by Force Engineering & Testing.**
  - 1. ASTM E 72-05
    - A. Transverse Loading = 49.6 psf (48" x 120" x 3.5")

**C. TESTS FOR FOAM PLASTIC PROPERTIES PER CHAPTER 26**

- 1. ASTM E 84-01, UL Certificate BRYX.R5692  
 Smoke-Developed Index 450, Flame Spread Index 20
- 2. ASTM E 84-05, Fabric DB 170S, Report #87004 by Owens Corning  
 Smoke-Developed Index 5, Flame Spread Index 5

**INSTALLATION REQUIREMENTS:****General:**

The manufacturers' published installation instructions and this report shall be strictly adhered to, and a copy of the installation instructions shall be available at all times on site during the installation of this product.

**Allowable Structural Loads for Ultimate Series Panels:**

Allowable axial, transverse, racking, header, floor anchorage, and top of track anchorage are noted in Tables 2 through 9. For loads greater than those specified in Tables 2 through 9, the specific condition shall be framed by other methods to meet applicable code requirements.

**Wall Covering:**

Panels at the time of erection and placement, shall be covered on the exterior by a water-resistive wrap as required by the Florida Building Code. The exterior of the wall panels shall be covered with an approved exterior wall covering. Installation methods of the product approved wall covering shall be in accordance with the manufacturer's recommendations subject to the approval by the local building code official.

**Interior:**

Panels shall be covered on the interior of the building by a pre-approved thermal barrier of .5 inch (12.7 mm) gypsum wall board or equivalent thermal barrier material that will limit the average temperature rise if the unexposed surface to not more than 250 ° F ( 120 ° C) after 15 minutes if fire exposure, complying with the standard time-temperature curve of ASTM E 119. See Section 2603.4 of the FBC for additional requirements or exceptions.

**LIMITATIONS AND CONDITIONS OF USE FOR NON-HVHZ:**

See Load Tables 2 through 9 for loading and limitations of use.

Wall panel units used for components and cladding only shall use Load Tables 4, 5, 8 and 9 for Transverse loading.

Any wall panels used for the Main Wind Frame Resistance System, must be designed by a professional engineer using the load tables that are part of this report.

**DESIGN PROCEDURE:**

Based on the dimensions of the structure, appropriate loads are determined using Chapter 16 of the FBC for all wall loading both horizontal, lateral, and vertical conditions. The component wind loads for wall cladding are used to determine the design bending moment for the structural wall and combined with the "worst" case design axial loads from the trusses bearing above. Structural wall panels designated as shear walls must also be evaluated for lateral loading and drift. All load bearing structural walls panels must be evaluated by an engineer to verify that all panel connections from the top of the wall to the slab, meet the FBC Chapter 16 load requirements.

**TABLE 1-PRODUCT SPECIFICATIONS**

| FOAM PROPERTIES :             | THERMAL PERFORMANCE:                                        | MOISTURE:                          | FIRE SAFETY:                              |
|-------------------------------|-------------------------------------------------------------|------------------------------------|-------------------------------------------|
| Compressive Strength: 16 psi. | Conductivity of Foam: 0.13-0.15 Btu-in/ft <sup>2</sup> hr°F | Vapor Permeability: 2.27 perm / in | Finish Rating: Sheetrock req'd on inside. |
| Compressive Modulus: 433 psi. | Minimum R Value: 7 per inch of thickness                    | Absorption: 1.6%                   | Foam Fire Rating: Class 1                 |
| Tensile Strength: 16 psi.     |                                                             | Solvent Resistance: Excellent      | Smoke Developed: <450 ASTM E-84           |
| Tensile Modulus: 325 psi.     |                                                             | Mold/Mildew Resistance: Excellent  | Flame Spread: <20 ASTM E-84               |
| Shear Strength: 31 psi.       |                                                             |                                    | Min. Self Ignition 806o F                 |
| Shear Modulus: 721 psi.       |                                                             |                                    | Min. Flash Ignition: 833o F               |
|                               |                                                             |                                    |                                           |

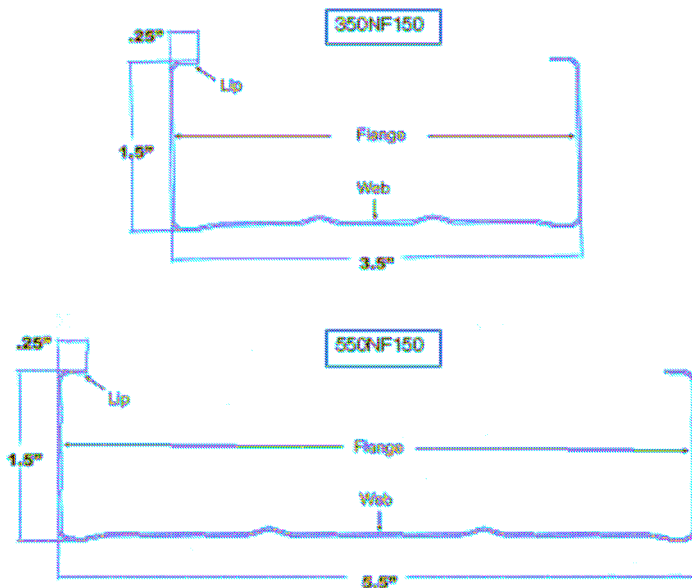
### Steel Frame Specifications

Platinum Advanced Technologies uses NUCONSTEEL™ Framing Members. The load bearing steel framing members are cold-formed C-shapes produced from structural quality steel complying with the requirements of one of the following:

1. ASTM A653 / A653M: SS Grades 33, 37, 40, & 50 (Class 1 and 3); or
2. ASTM A792 / A792M: Grades 33, 37, 40, & 50 (Class 1); or
3. ASTM A875 / A875M: SS Grades 33, 37, 40, & 50 (Class 1 and 3); or
4. ASTM A1003 / A1003M
5. Steels that comply with ASTM A653, except for tensile and elongation requirements, are permitted provided the ratio of tensile strength to yield point is at least 1.08 and the total elongation is at least 10 percent for a two-inch gage length or 7 percent for an eight-inch gauge length.

### C-Shape Dimensions

Framing members consist of NUCONSTEEL™ C-Shapes with nominal dimensions and properties shown in tables below. The same members are used for studs, joists, blocking and tracks.



| Sections    | Design Thickness<br>In | Area<br>In <sup>2</sup> | Weight<br>lb/ft | Gross Properties      |                       |          |                       |          | Effective Properties (33 ksi) |                       |                       |            | Effective Properties (50 ksi) |                       |                       |            |
|-------------|------------------------|-------------------------|-----------------|-----------------------|-----------------------|----------|-----------------------|----------|-------------------------------|-----------------------|-----------------------|------------|-------------------------------|-----------------------|-----------------------|------------|
|             |                        |                         |                 | Ix<br>In <sup>4</sup> | Sx<br>In <sup>3</sup> | Rx<br>In | Iy<br>In <sup>4</sup> | Ry<br>In | Ae<br>In <sup>2</sup>         | Ix<br>In <sup>4</sup> | Sx<br>In <sup>3</sup> | Ma<br>In-k | Ae<br>In <sup>2</sup>         | Ix<br>In <sup>4</sup> | Sx<br>In <sup>3</sup> | Ma<br>In-k |
| Series 735  |                        |                         |                 |                       |                       |          |                       |          |                               |                       |                       |            |                               |                       |                       |            |
| 350NF150-33 | 0.0346                 | 0.233                   | 0.799           | 0.451                 | 0.26                  | 1.407    | 0.063                 | 0.519    | 0.15                          | 0.419                 | 0.223                 | 4.408      | 0.128                         | 0.308                 | 0.207                 | 6.183      |
| 350NF150-43 | 0.0451                 | 0.301                   | 1.043           | 0.502                 | 0.334                 | 1.402    | 0.079                 | 0.514    | 0.231                         | 0.568                 | 0.312                 | 6.175      | 0.196                         | 0.535                 | 0.284                 | 8.511      |
|             |                        |                         |                 |                       |                       |          |                       |          |                               |                       |                       |            |                               |                       |                       |            |
| Series 755  |                        |                         |                 |                       |                       |          |                       |          |                               |                       |                       |            |                               |                       |                       |            |
| 550NF150-33 | 0.0346                 | 0.901                   | 1.027           | 1.299                 | 0.471                 | 2.078    | 0.071                 | 0.486    | 0.153                         | 1.195                 | 0.414                 | 8.139      | 0.13                          | 1.071                 | 0.345                 | 10.345     |
| 550NF150-43 | 0.0451                 | 0.39                    | 1.339           | 1.673                 | 0.607                 | 2.071    | 0.09                  | 0.481    | 0.238                         | 1.613                 | 0.573                 | 11.32      | 0.201                         | 1.533                 | 0.531                 | 15.887     |

|                   | Torsional Properties                     |                                   |                      |                      |                      |
|-------------------|------------------------------------------|-----------------------------------|----------------------|----------------------|----------------------|
|                   | J <sub>x1</sub> /1000<br>In <sup>4</sup> | C <sub>w</sub><br>In <sup>6</sup> | X <sub>a</sub><br>In | F <sub>a</sub><br>In | I <sub>x</sub><br>In |
| <b>Series 735</b> |                                          |                                   |                      |                      |                      |
| 350NF150-33       | 0.093                                    | 0.144                             | -1.019               | 1.813                | 1.995                |
| 350NF150-43       | 0.204                                    | 0.181                             | -1.006               | 1.8                  | 1.988                |
| <b>Series 755</b> |                                          |                                   |                      |                      |                      |
| 550NF150-33       | 0.13                                     | 0.396                             | -0.845               | 2.295                | 3.139                |
| 550NF150-43       | 0.264                                    | 0.499                             | -0.834               | 2.284                | 3.143                |

## Notes

1. Section properties are calculated in accordance with the North American Specification for the Design of Cold Formed Steel Structural Members, 2001 Edition.
2. The minimum delivered steel thickness per code is 95% of the design thickness.
3. Steel shall conform to ASTM A653 Structural Grade 50 or Grade 33 with minimum yield strengths of 50,000 psi or 33,000 psi, respectively.

Steel shall be galvanized in accordance with ASTM A924 Coating Class G60.

## Material Thickness

Framing members meet or exceed the minimum (uncoated) thickness values given in the table below:

| Designation<br>(mils) | Minimum<br>Steel Thickness<br>(inches) | Reference<br>Gauge<br>Number |
|-----------------------|----------------------------------------|------------------------------|
| 21                    | 0.0209                                 | 24                           |
| 27                    | 0.0269                                 | 22                           |
| 33                    | 0.0329                                 | 20                           |
| 43                    | 0.0428                                 | 18                           |

## Yield Strength and Coating

The yield strength of steel shall be 33ksi or 50ksi. Members shall have a minimum galvanized coating thickness of G60 for load-bearing members and G40 for non load-bearing members.

Framing members used in buildings located in harsh environments (e.g. coastal areas) might require greater corrosion protection (e.g. G90). Steel framing members cannot be in direct contact with moisture from the ground or directly exposed to the outdoors.

Data and Specifications Courtesy of NUCONSTEEL™. Platinum Advanced Technologies, Inc. is a customer of NUCONSTEEL™ and all rights to data and steel structural members are the sole property of NUCONSTEEL™, a Nucor Company.

**TABLE 2 - WALL AXIAL LOADING**

|                  | PANEL HEIGHT | 350S150-33 FULLY FOAMED | 550S150-33 FULLY FOAMED |
|------------------|--------------|-------------------------|-------------------------|
|                  |              | 3-1/2 INCH CORE         | 5-1/2 INCH CORE         |
| AXIAL LOAD (PLF) | 10'-0"       | 1,688                   | 2,874                   |
|                  |              |                         |                         |

- 1) Maximum allowable axial load is limited to the loads tabulated for axial condition alone.
- 2) Ultimate failure load divided by a safety factor of 2.13 was tabulated per AISI for 550S150-33
- 3) Ultimate failure load divided by a safety factor of 3.0 was tabulated per AISI for 350S150-33
- 4) Values are based on a maximum height to width ratio of 2.5:1.
- 5) Load values were determined from ASTM E-72 testing conducted by ATI Report # 67472.01-801-32
- 6) Load values were determined from ASTM E-72 testing conducted by ATI Report # 63529.01-801-32

## WALL - INTERACTION EQUATION

This equation is used to determine design suitability. The equation takes into account the ultimate load for a panel subjected to both axial and transverse ( bending) conditions:

$$\frac{\text{design axial load}}{\text{allowable axial load}} + \frac{\text{design transverse load}}{\text{allowable transverse load}} \leq 1$$

(See Load Table 2)                      ( See Load Table 4&5)

TABLE 3 – SHEAR WALL LOADING

|               |            |              |                         |         |         |  |
|---------------|------------|--------------|-------------------------|---------|---------|--|
|               |            | PANEL HEIGHT | 350S150-33 FULLY FOAMED |         |         |  |
|               |            |              | 3-1/2 INCH CORE         |         |         |  |
| RACKING SHEAR | 10'-0"     |              | 484 PLF                 |         |         |  |
|               | WALL DEFL. | H/480        | H/360                   | H/240   | H/180   |  |
| RACKING SHEAR |            | 92 PLF       | 121 PLF                 | 182 PLF | 244 PLF |  |

- 1) Ultimate failure load divided by a safety factor of 1.947 was tabulated per AISI for 350S150-33
- 2) Values are based on a maximum height to width ratio of 1.25:1.
- 3) Urethane sealant was applied between studs at the panel-to-panel joint and between the bottom track and the floor.
- 4) 4ft wide panels must be joined with 6ea 20ga steel straps. (See Detail 1 & 6) for installation.
- 5) 18ga top & bottom tracks must be continuous over shear wall and secured per installation Detail 1
- 6) A-bolts must be installed 6" maximum from each end and 16" o.c. thereafter between ends of shear wall panel.
- 8) Racking Load values were determined from ASTM E-72 testing conducted by ATI  
Report # 63529.01-801-32

|               |            |              |                         |         |         |  |
|---------------|------------|--------------|-------------------------|---------|---------|--|
|               |            | PANEL HEIGHT | 550S150-33 FULLY FOAMED |         |         |  |
|               |            |              | 5-1/2 INCH CORE         |         |         |  |
| RACKING SHEAR | 10'-0"     |              | 406 PLF                 |         |         |  |
|               | WALL DEFL. | H/480        | H/360                   | H/240   | H/180   |  |
| RACKING SHEAR |            | 88 PLF       | 110 PLF                 | 155 PLF | 199 PLF |  |

- 1) Ultimate failure load divided by a safety factor of 1.947 was tabulated per AISI for 550S150-33
- 3) Values are based on a maximum height to width ratio of 1.25:1.
- 4) 4ft wide panels must be joined with 6ea 20ga steel straps. (See Detail 2 & 6) for installation.
- 5) 18ga top & bottom tracks must be continuous over shear wall and secured per installation Detail 2
- 6) A-bolts must be installed 4" maximum from each end and 16" o.c. thereafter between ends of shear wall panel.
- 7) Racking Load values were determined from ASTM E-72 testing conducted by ATI  
Report # 67472.01-801-32

**TABLE 4 - TRANSVERSE LOADING ( PSF)**

| 350S150-33 STUDS FULLY FOAMED |       |       |       |       |       |       |       |       |       |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| STUD SPACING                  | 12"   |       |       | 16"   |       |       | 24"   |       |       |
| DEFLECTION                    | L/360 | L/240 | L/180 | L/360 | L/240 | L/180 | L/360 | L/240 | L/180 |
| 4 ft                          | 310.3 | 310.3 | 310.3 | 233.3 | 233.3 | 233.3 | 155.2 | 155.2 | 155.2 |
| 5 ft                          | 192.3 | 198.6 | 198.6 | 144.6 | 149.3 | 149.3 | 96.1  | 99.3  | 99.3  |
| 6 ft                          | 111.3 | 137.9 | 137.9 | 83.7  | 103.7 | 103.7 | 55.6  | 69    | 69    |
| 7 ft                          | 70.1  | 101.3 | 101.3 | 52.7  | 76.2  | 76.2  | 35    | 50.7  | 50.7  |
| 8 ft                          | 46.9  | 70.4  | 77.6  | 35.3  | 52.9  | 58.3  | 23.5  | 35.2  | 38.8  |
| 9 ft                          | 33    | 49.5  | 61.3  | 24.8  | 37.2  | 46.1  | 16.5  | 24.7  | 30.6  |
| 10 ft                         | 24    | 36.1  | 48.1  | 18.1  | 27.1  | 36.1  | 12    | 18    | 24    |

- 1) Allowable loads are in PSF.
- 2) Limited to ultimate failure load divided by a safety factor of 1.947 per AISI.
- 3) Wall panels have 3-1/2 inch maximum core thickness.
- 4) Load values were determined from ASTM E-72 testing conducted by FET Report #254-0374T-07
- 5) Average EI = 16224670.31 lb-in<sup>2</sup>

**TABLE 5 – TRANSVERSE LOADING ( PSF)**

| 550S150-33 STUDS FULLY FOAMED |       |       |       |       |       |       |       |       |        |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| STUD SPACING                  | 12"   |       |       | 16"   |       |       | 24"   |       |        |
| DEFLECTION                    | L/360 | L/240 | L/180 | L/360 | L/240 | L/180 | L/360 | L/240 | 572.30 |
| 4 ft                          | 643.8 | 644.0 | 643.8 | 484.1 | 484.1 | 484.1 | 321.9 | 321.9 | 321.9  |
| 5 ft                          | 412.1 | 413.0 | 412.1 | 309.8 | 309.8 | 309.8 | 206.0 | 206.0 | 206.0  |
| 6 ft                          | 286.2 | 287.0 | 286.2 | 215.2 | 215.2 | 215.2 | 143.1 | 143.1 | 143.1  |
| 7 ft                          | 186.0 | 211.0 | 210.2 | 139.8 | 158.1 | 158.1 | 93.0  | 105.1 | 105.1  |
| 8 ft                          | 124.6 | 161.0 | 161.0 | 93.7  | 121.0 | 121.0 | 62.3  | 80.5  | 80.5   |
| 9 ft                          | 87.5  | 128.0 | 127.2 | 65.8  | 95.6  | 95.6  | 43.8  | 63.6  | 63.6   |
| 10 ft                         | 63.8  | 95.7  | 103.0 | 48.0  | 71.9  | 77.5  | 31.9  | 47.8  | 51.5   |

- 1) Allowable loads are in PSF.
- 2) Limited to ultimate failure load divided by a safety factor of 1.947 per AISI.
- 3) Wall panels have 5-1/2 inch maximum core thickness.
- 4) Load values were determined from ASTM E-72 testing conducted by ATI Report # 67472.01-801-32
- 5) Average EI = 43057062.68 lb-in<sup>2</sup>

**TABLE 6 - WALL HEADER LOADING**

| <b>350S150-33 STUDS @ 16" O.C. FULLY FOAMED</b> |       |       |       |       |       |       |
|-------------------------------------------------|-------|-------|-------|-------|-------|-------|
| HEADER DEPTH                                    |       |       |       |       |       |       |
| HEADER SPAN ( FT)                               | 12"   |       |       | 36"   |       |       |
| DEFLECTION                                      | L/480 | L/360 | L/240 | L/480 | L/360 | L/240 |
| 6 ft                                            | 239   | 325   | 464   | 780   | 828   | 828   |
| 7 ft                                            | 185   | 270   | 339   | 580   | 604   | 604   |
| 8 ft                                            | 130   | 214   | 214   | 380   | 380   | 380   |

- 1) Allowable loads are in PLF.
- 2) Ult. Failure load divided by a safety factor of 1.9466 for 12" deep headers per AISI
- 3) Ult. Failure load divided by a safety factor of 2.3548 for 96"x 36" deep header per AISI
- 4) Ult. Failure load divided by a safety factor of 1.9466 for 72"x 36" deep header per AISI
- 5) Header Connections to jambs or wall sections shall be designed for each installation.
- 6) 18ga oversized top track must run continuous over header.
- 5) Values were determined from ASTM E-72 testing conducted by ATI Report # 67472.01-801-32

**TABLE 7 - WALL HEADER REACTIONS**

| <b>350S150-33 STUDS @ 16" O.C. FULLY FOAMED</b> |            |     |      |            |          |          |
|-------------------------------------------------|------------|-----|------|------------|----------|----------|
| HEADER SPAN ( FT)                               | 12"-HEADER |     |      | 36"-HEADER |          |          |
| END REACTION (Ry)                               | lbs        | Lbs | lbs  | Lbs        | Lbs      | Lbs      |
| 6 ft                                            | 717        | 975 | 1392 | 2046 (4)   | 2046 (4) | 2046 (4) |
| 7 ft                                            | 647        | 945 | 1186 | 2030       | 2114     | 1208     |
| 8 ft                                            | 520        | 856 | 856  | 1520       | 1520     | 1520     |

- 1) Allowable loads are in pounds ( lbs).
- 2) 12-inch header attachment is 2ea 3"x10" Joint Straps with 8ea #10 fasteners both sides, (See Detail 7).
- 3) 36-inch header attachment is 2ea 3"x27" Joint Straps with 12ea #10 fasteners both sides, ( See Detail 8).
- 4) Header Reaction is controlled by maximum capacity of joining strap - 2046 lbs.
- 5) Joining Strap capacity is based on a t = .0346" ; Fy = 33 ksi; Fu = 45 ksi .

**TABLE 8 - BASE TRACK ANCHORAGE & LOADING**

| BASE TRACK TYPE          | A-BOLT  | BASE TRACK ALLOWABLE LOADS |              |         |                |
|--------------------------|---------|----------------------------|--------------|---------|----------------|
|                          | SPACING | H-WIND                     | A-BOLT SHEAR | UPLIFT  | A-BOLT TENSION |
| 350T200-43 OR 550T200-43 | 16"     | 200 PLF                    | 304 LBS      | 450 PLF | 690 LBS        |
|                          | 16"     | 250 PLF                    | 380 LBS      | 410 PLF | 620 LBS        |
|                          | 16"     | 300 PLF                    | 456 LBS      | 370 PLF | 560 LBS        |
|                          | 16"     | 350 PLF                    | 532 LBS      | 310 PLF | 470 LBS        |
|                          | 16"     | 400 PLF                    | 608 LBS      | 240 PLF | 370 LBS        |

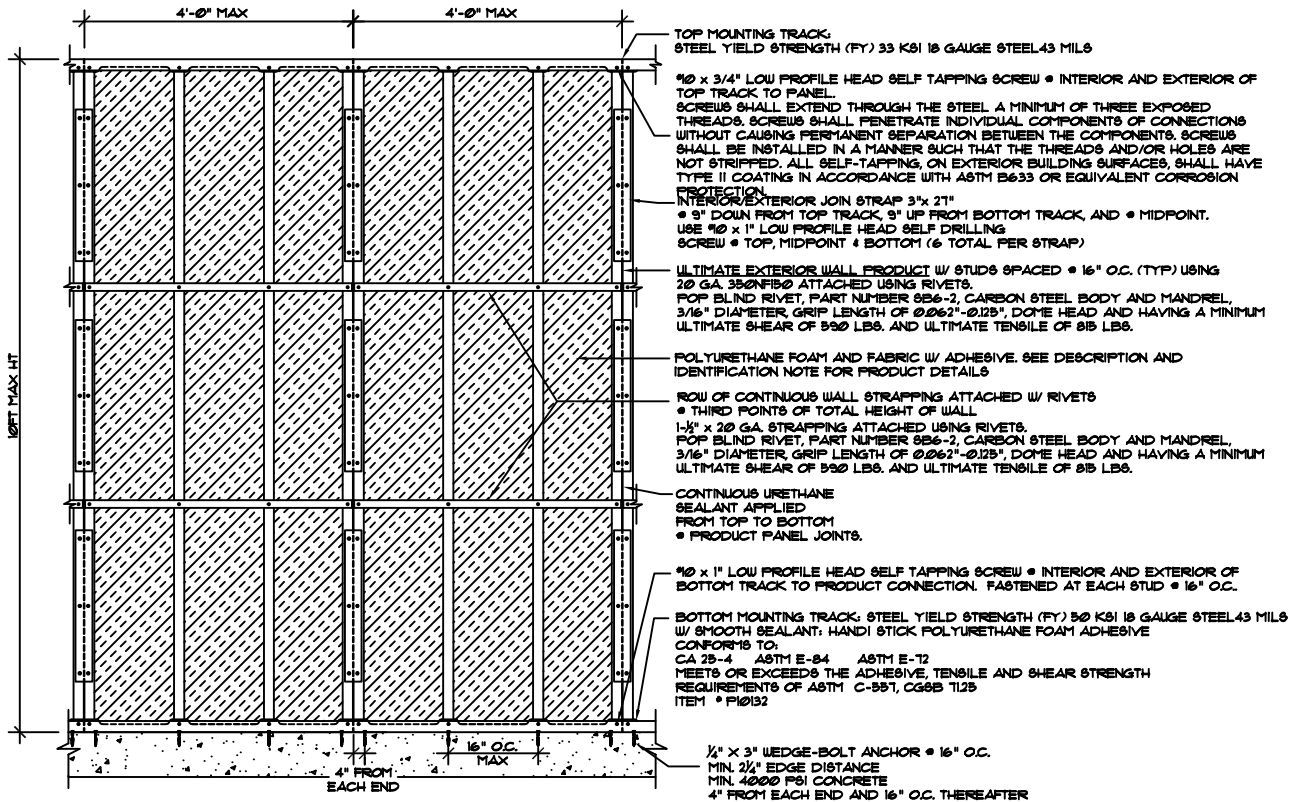
- 1) Base track was evaluated per AISI standards for bending and shear in the strong axis.
- 2) Anchorage loads for shear and tension are based on a min. concrete edge distance of 2-1/4".
- 3) Minimum concrete slab strength is 4000 psi and a minimum base material depth of 4".
- 4) Stud wall assembly must be installed into base track per Platinum Details 3 & 4.
- 5) All anchorage capacities are based on Powers Wedge-bolt 1/4" x 3" fasteners.(914-235-6000)
- 6) Base track allowable loads are based on checking the interaction equations for combined shear & bending for the base track; combined shear & tension on the A-bolt; combined pullover & bearing on the track web; and the allowable fastener shear for fastening the base track to a 20ga stud wall.

**TABLE 9 – TOP TRACK ANCHORAGE & LOADING**

| TOP TRACK TYPE           | TRUSS   | TOP TRACK ALLOWABLE LOADS |                |         |                  |
|--------------------------|---------|---------------------------|----------------|---------|------------------|
|                          | SPACING | H-WIND                    | FASTENER SHEAR | UPLIFT  | FASTENER TENSION |
| 350T200-43 OR 550T200-43 | 16"     | 265 PLF                   | 1072 LBS       | 665 LBS | 665 LBS          |
|                          | 24"     | 176.7 PLF                 | 1072 LBS       | 665 LBS | 665 LBS          |
|                          |         |                           |                |         |                  |
|                          |         |                           |                |         |                  |
|                          |         |                           |                |         |                  |

- 1) Top track was evaluated per AISI standards for bending and shear in the strong axis.
- 2) Fastener loads for shear and tension are based on #10-16 x 1" #3SD into 18ga 33 ksi material.
- 3) Stud wall assembly must be installed into top track per Platinum Details 1,2, & 9.
- 4) Truss web must be a minimum of 18ga 33 ksi material.
- 5) Clip connection is based on Dietrich Uni-clip™ with 4ea #10-16 x 1" #3SD fasteners per clip flange.

NOTE:  
SCREWS FOR STEEL-TO-STEEL CONNECTIONS SHALL BE INSTALLED WITH A MINIMUM EDGE DISTANCE OF 1 1/2" SCREWS DIAMETERS AND CENTER TO CENTER SPACING OF 3" SCREWS DIAMETERS, AND SHALL BE SELF-TAPPING IN COMPLIANCE WITH SAE J18



1 3 1/2" EXTERIOR WALL PRODUCT (TYP.)  
SCALE: 3/4" = 1'-0"

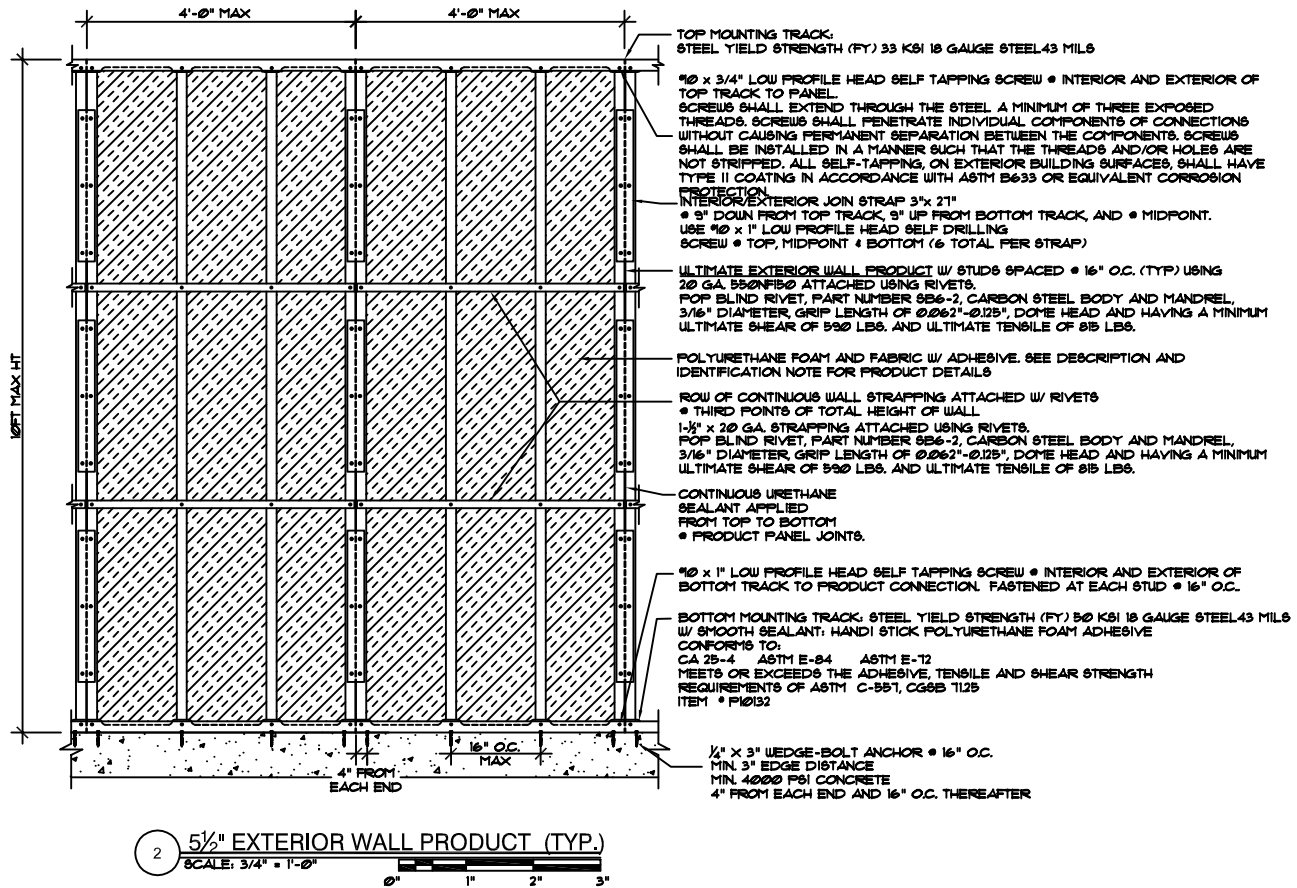
PLATINUM ULTIMATE WALL PRODUCT NOTE:

BASF POLYURETHANE FOAM, THICKNESS 3 1/2" PER CAVITY W/  
FABRIC ON EXTERIOR FACE GLUED TO EXTERIOR FACE OF STUDS.  
BASF ELASTOPOR P 17226 R RESIN/ELASTOPOR P 1046U  
ISOOCYANATE RIGID URETHANE FOAM SYSTEM

GLUE BOTH SIDES  
R.S. HUGHES COMPANY  
3M ADHESIVE SPRAY 90 HI-STRENGTH

FIBERGLASS WOVEN FABRIC BOTH SIDES  
OWENS-CORNING  
D3 110-S OR EQUIVALENT

NOTE:  
SCREWS FOR STEEL-TO-STEEL CONNECTIONS SHALL BE INSTALLED WITH A MINIMUM EDGE DISTANCE OF 15 SCREWS DIAMETERS AND CENTER TO CENTER SPACING OF 3 SCREW DIAMETERS, AND SHALL BE SELF-TAPPING IN COMPLIANCE WITH SAE J18

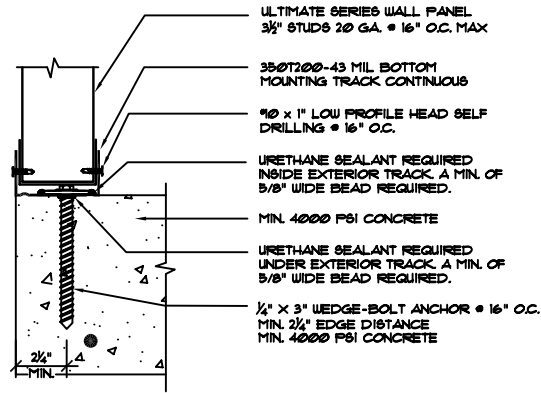


PLATINUM ULTIMATE WALL PRODUCT NOTE:

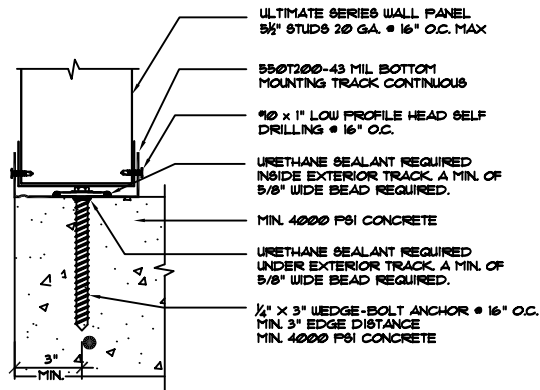
BASF POLYURETHANE FOAM, THICKNESS 5 1/2" PER CAVITY W/ FABRIC ON EXTERIOR FACE GLUED TO EXTERIOR FACE OF STUDS.  
BASF ELASTOPOR P 11226 R RESIN/ELASTOPOR P 1046U  
ISOCYANATE RIGID URETHANE FOAM SYSTEM

GLUE BOTH SIDES  
R.S. HUGHES COMPANY  
3M ADHESIVE SPRAY 90 HI-STRENGTH

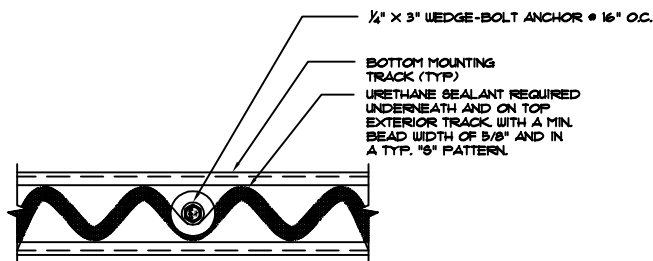
FIBERGLASS WOVEN FABRIC BOTH SIDES  
QUENS-CORNING  
D3 F10-S OR EQUIVALENT



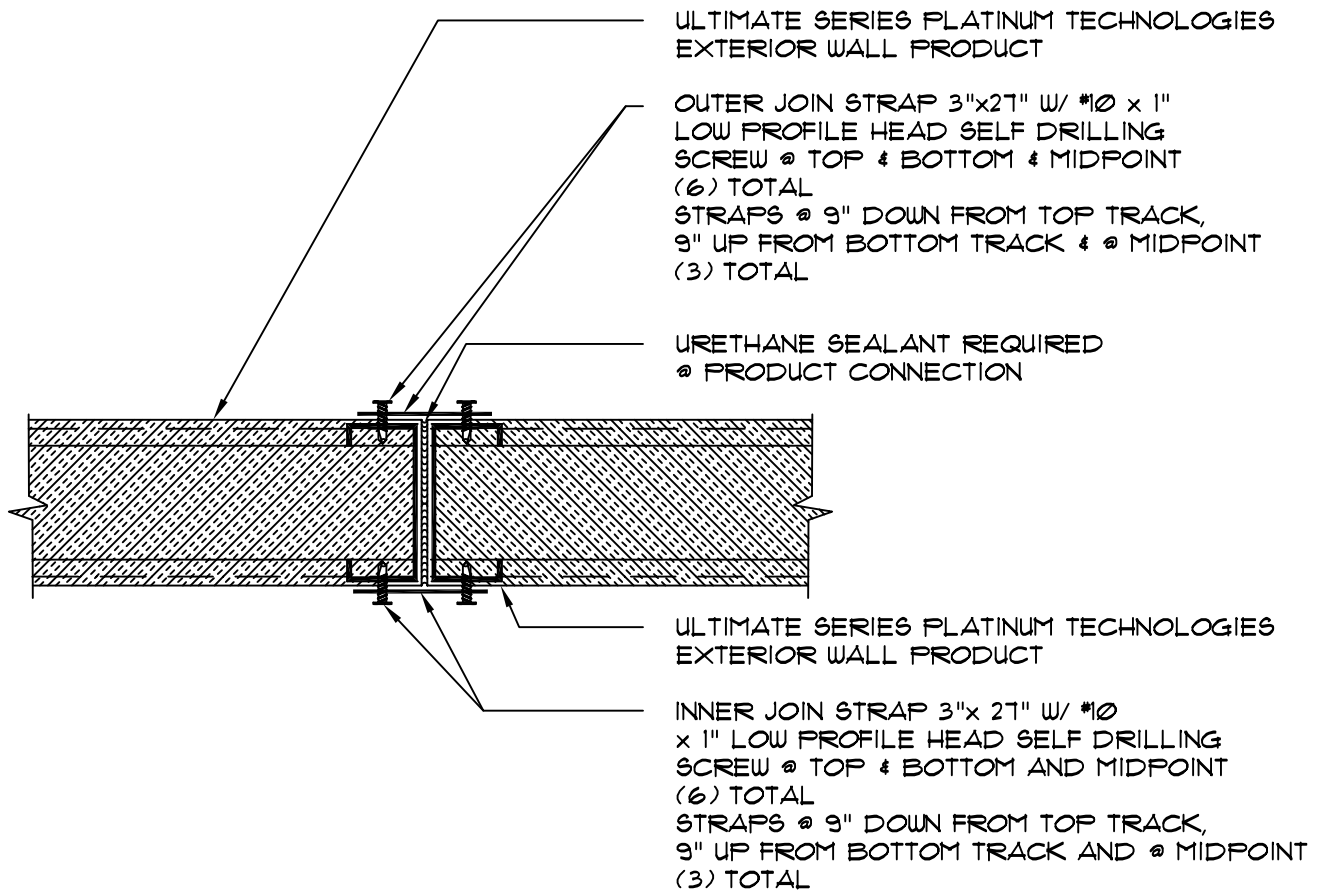
3  
TYPICAL  
LOAD BRG.TRACK TO FOUNDATION CONNECTION  
SCALE: 3" = 1'-0"



4  
TYPICAL  
LOAD BRG.TRACK TO FOUNDATION CONNECTION  
SCALE: 3" = 1'-0"



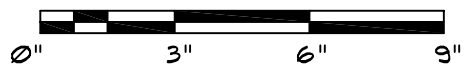
5  
TYPICAL  
LOAD BRG.TRACK TO FOUNDATION CONNECTION  
SCALE: 3" = 1'-0"

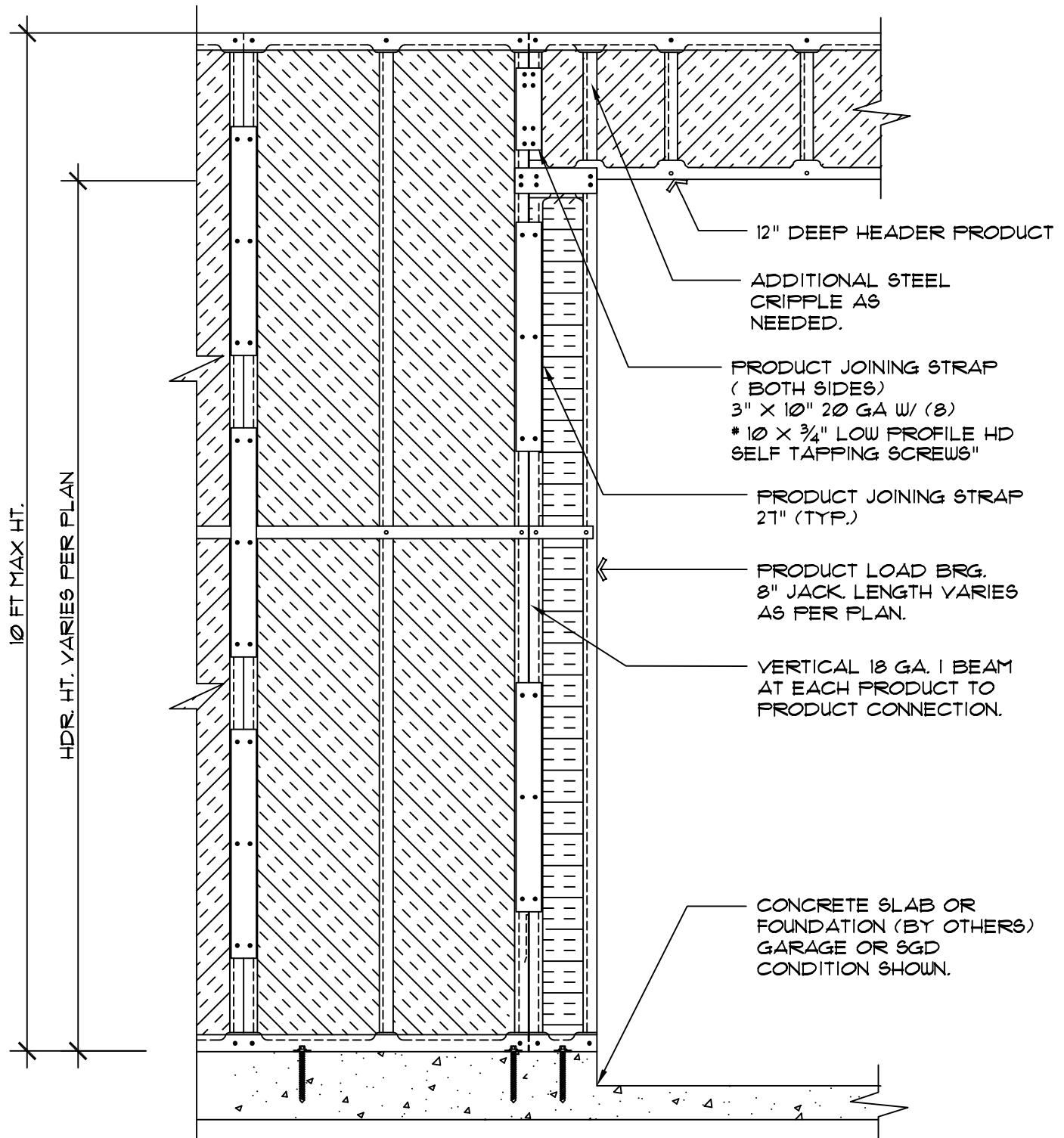


PLATINUM TECHNOLOGIES<sup>T.M.</sup> EXT. WALL  
PRODUCT TO PRODUCT CONNECTION (TYP.)

6

SCALE: 3" = 1'-0"

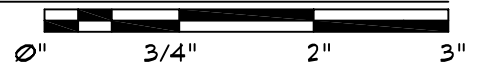


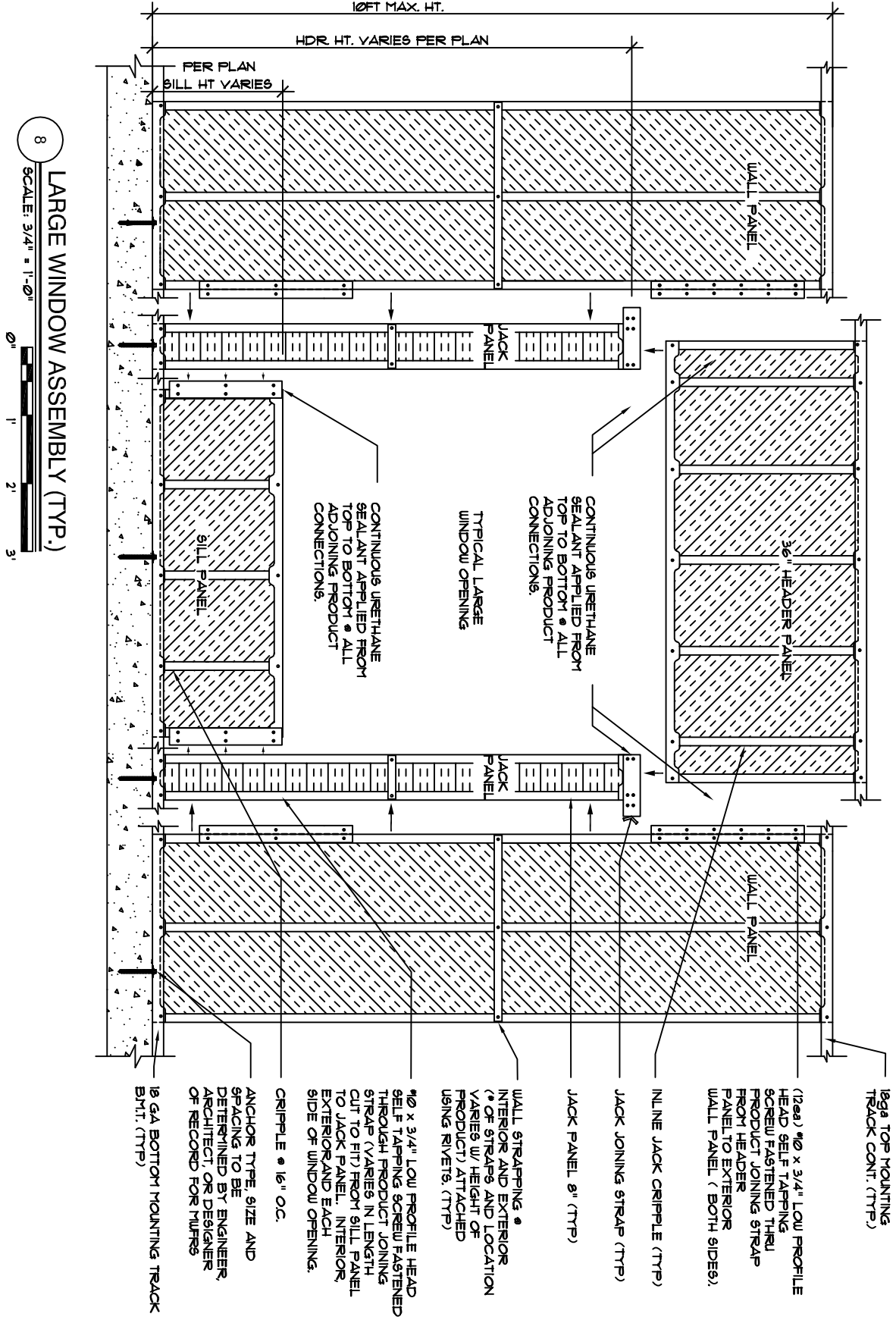


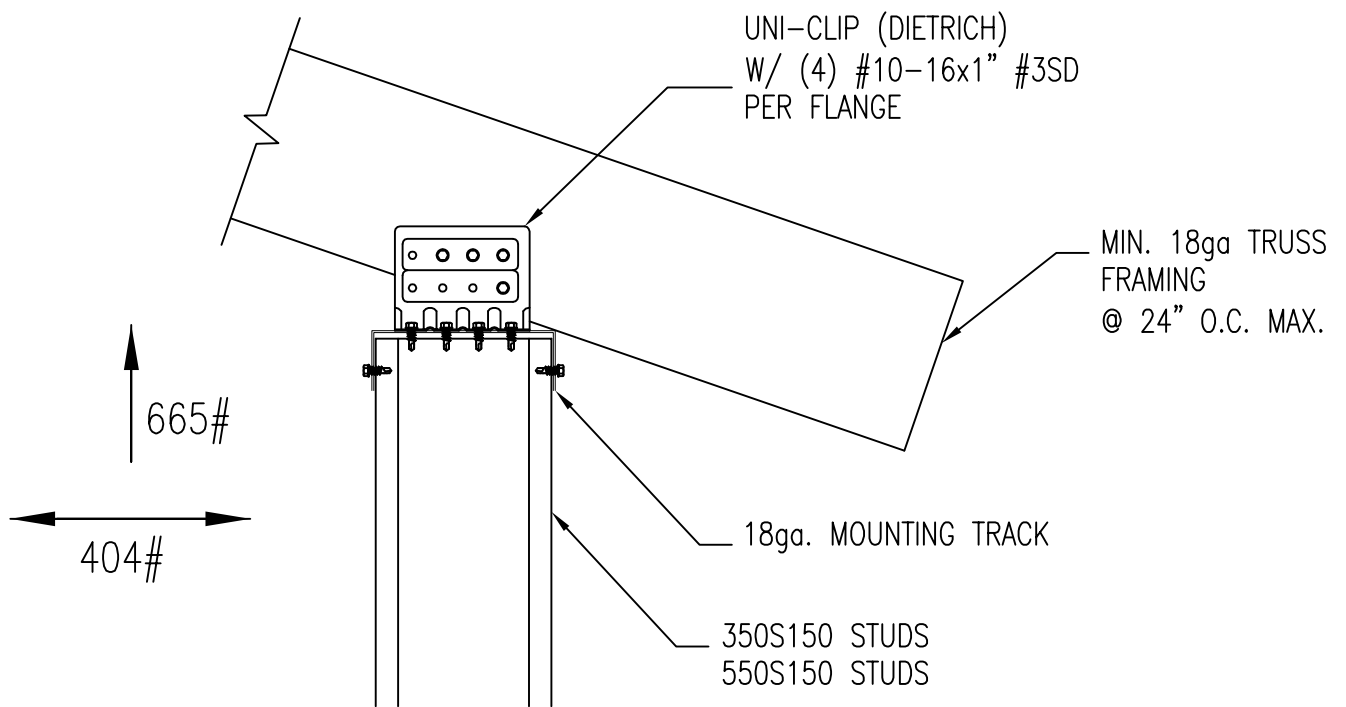
7

EXT.. PRODUCT W/ JACK TO HDR. CONNECTION (TYP.)

SCALE: 3/4" = 1'-0"







TYPICAL  
TOP TRACK TO TRUSS CONNECTION

9

SCALE: 3" = 1'-0"

