

Parklex Prodema USA, Inc.
Design No. PUI/CWP 30-03
Exterior Non-Load Bearing Wall Assembly
NATURCLAD-B F Panels – Exposed Fasteners
NFPA 285
Rating: Meets Conditions of Acceptance

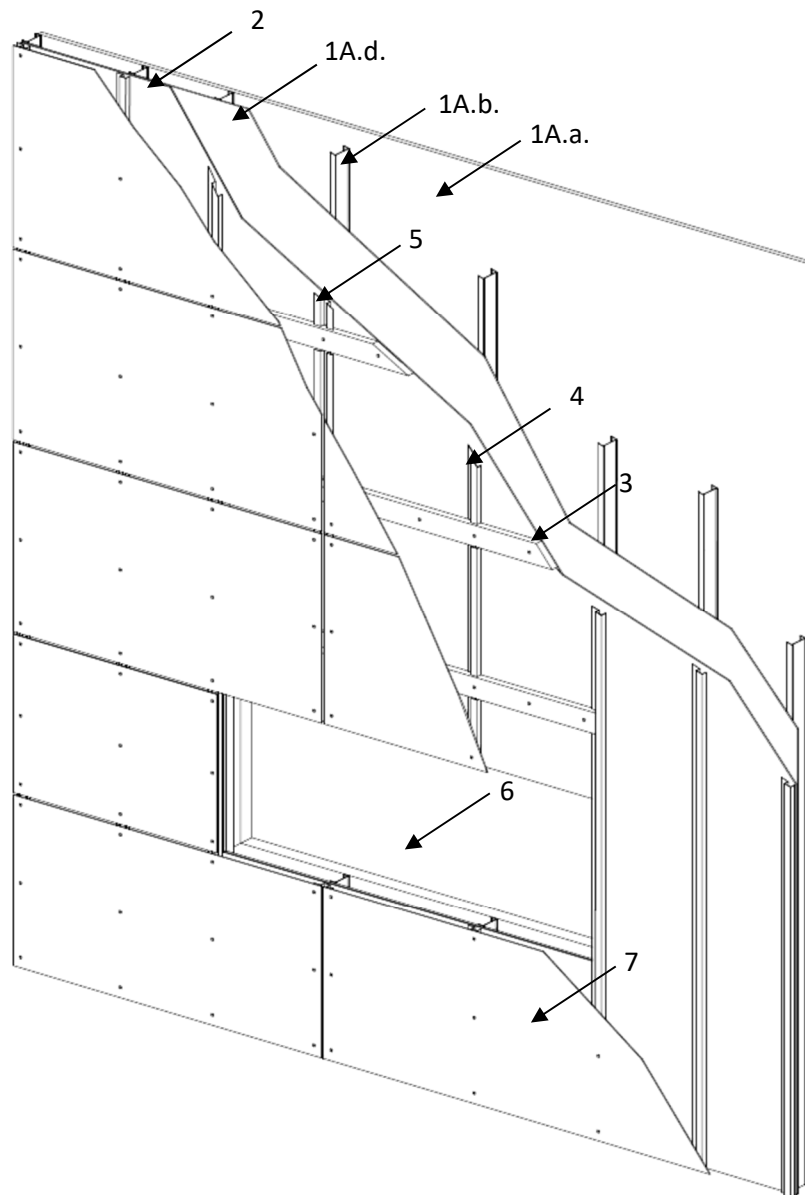


Figure 1 – Assembly Components

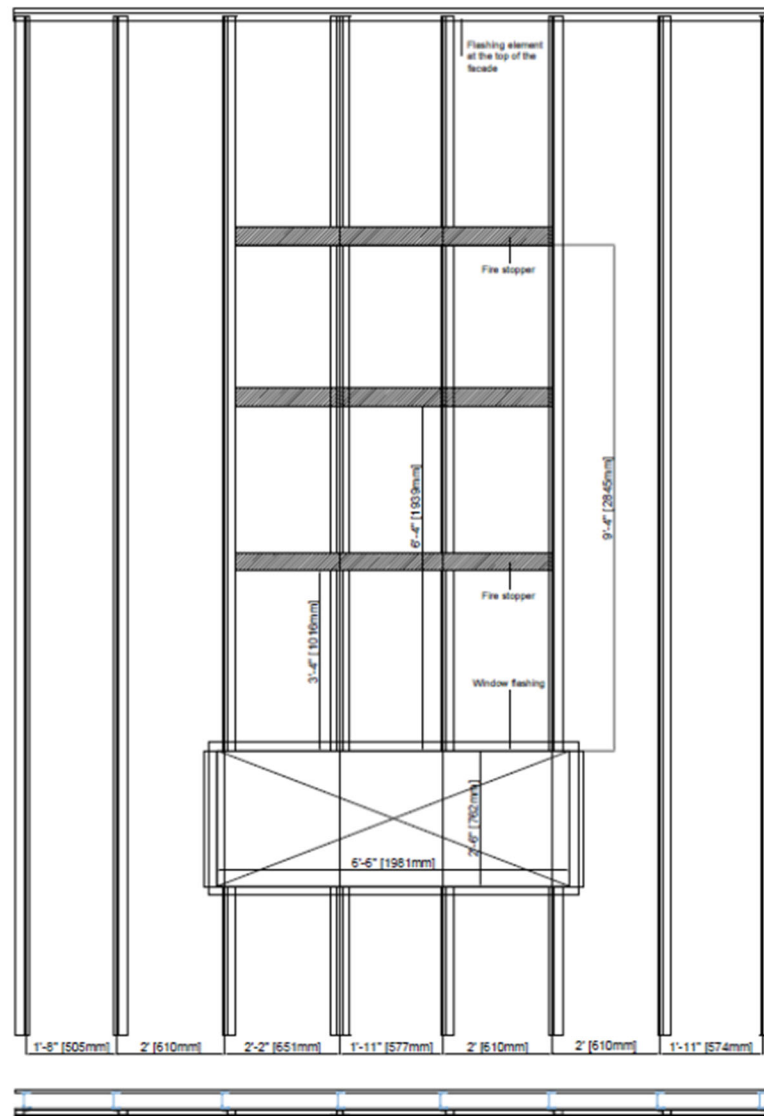


Figure 2 – Placement of Fire Barrier

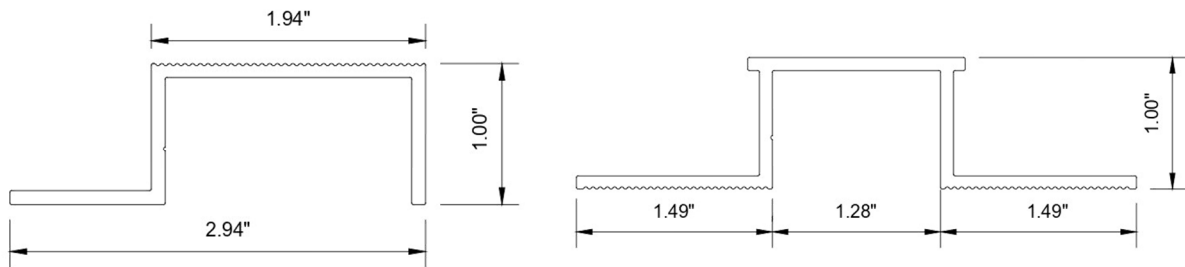


Figure 3 – J- and H-Section Studs



- 1. BASE WALL CONSTRUCTION:** Construct a wall assembly that shall comply with the local Building Code or other applicable regulatory requirements as established by the local Authority Having Jurisdiction. The wall shall be one of the following noncombustible constructions:

A. STEEL-FRAMED WALL ASSEMBLY –

- a. **INTERIOR CLADDING:** Install nominal 15mm thick, moisture resistant gypsum boards, meeting Type H1 requirements according to EN 520, e.g. ISOPLAC Type H1 gypsum boards, on steel studs using self-drilling steel screws of $\varnothing 3.5\text{mm} \times 25\text{mm}$ dimensions.

JOINT TAPE AND COMPOUND – (Not Shown) 51mm wide, Micro-perforated and damp proof, ISOPRACTIC paper joint tape or equivalent (weight: 142 gsm) embedded in joint compound, ISOPRACTIC PJP or equivalent (density: 1.7 g/cm^3), is used along the horizontal and vertical joints on the interior cladding panels.

- b. **STEEL STUDS:** Horizontal U-section steel channels, 0.55mm thick PLACO Rail 90, $30\text{mm} \times 90\text{mm} \times 30\text{mm}$, are attached using zinc-coated screws of $\varnothing 6.3\text{mm} \times 25\text{mm}$ dimensions. Install vertical C-Section steel studs, 0.6mm thick PLACO Montante 90, $41\text{mm} \times 88.5\text{mm} \times 39\text{mm}$ section, max. spacing 610mm, attached to horizontal channel by metal-to-metal self-drilling steel screws of $\varnothing 3.5\text{mm} \times 9.5\text{mm}$ dimensions. Steel framing must comply with EN 14195.
- c. **FIRESTOP:** (Not Shown) Install 100mm wide strips of 120mm thick, A1 EN 13501-1 classified, dual density 110-

40kg/m^3 , mineral wool insulation fire stopping, e.g. ROCKWOOL Ventirock Duo/120, on the horizontal channels along the floor line.

- d. **EXTERIOR SHEATHING:** Install nominal 12.5mm thick, glass-mat faced gypsum boards, meeting Type GM-H1R-A1 requirements according to EN 15283-1, e.g. FIBRANGyps NEXTBOARD gypsum boards, on steel studs using self-drilling steel screws of $\varnothing 4.2\text{mm} \times 39\text{mm}$ dimensions.

JOINT TAPE AND COMPOUND – (Not Shown) 100mm wide, fiber-glass mesh tape, Tramaglass 160 R131 A101 joint tape or equivalent (weight: 160 gsm) embedded in cement mortar, FIBRANGyps NEXT COAT or similar (density: 1.35 g/cm^3), is used along the horizontal and vertical joints on the exterior sheathing panels.

B. CONCRETE CONSTRUCTION.

C. MASONRY CONSTRUCTION.

- 2. WATER-RESISTIVE BARRIER:** Attach, 0.175mm thick, 68 gsm, DuPont Tyvek® FireCurb®, high-density polyethylene (HDPE) breather membrane (BBA Certificate Number: 90/2548) to Exterior Sheathing using staples.
- 3. FIRE BARRIER:** Attach Intertek Listed Tenmat FF102/50 ventilated cavity fire barrier (Spec ID 55536) to the H- and J-Section studs using stainless-steel screws of $\varnothing 5\text{mm} \times 70\text{mm}$ dimensions, spaced at 250mm. The fire barrier must be positioned with a maximum gap of 1-in. between the barrier and the inner face of the exterior cladding. Three fire barriers must be installed above opening, for the full width of the opening, and located at approximate 40 in.



intervals, located below horizontal joints in the exterior cladding panels.

4. **J-SECTION STUD:** 6063-T5 aluminum J-section studs (Dimensions: 3 in. (74.7mm) × 1 in. (25.4mm) and 2.5mm thick), spaced at 24 in., are installed vertically on the base-wall steel framing using DIN 7504-K zinc-plated steel screws having Ø5.5mm × 25mm dimensions. When attached to a concrete or masonry wall, equivalent fastening must be designed by a licensed design professional.
5. **H-SECTION STUD:** 6063-T5 aluminum H-section studs (Dimensions: 4.5 in. (107.9mm) × 1 in. (25.4mm) and 2.5mm thick) are installed vertically along the vertical joints of the Exterior Cladding panels (Item 7), on the base-wall steel framing using DIN 7504-K zinc-plated steel screws having Ø5.5mm × 25mm dimensions. When attached to a concrete or masonry wall, equivalent fastening must be designed by a licensed design professional.
6. **EXTERIOR INSULATION:** Min. 1-in., 4 pcf noncombustible mineral wool insulation may be installed over the exterior sheathing provided the max. 1-in. air gap limit is maintained. The mineral wool must be installed with girts sized for the insulation thickness.

7. **WINDOW OPENINGS:** Window openings are first covered with one layer of exterior sheathing boards and then L-shape galvanized steel profile flashings of 1mm thickness and 115mm × 60mm section are attached to steel channels along the window perimeter using DIN 7504-K zinc-plated steel screws of Ø5.5mm × 38mm dimensions, covering the inside face of the opening and lapping on to the exterior cladding panels.

8. EXTERIOR CLADDING PANELS

CERTIFIED PRODUCT: Parklex Prodema USA, Inc.'s NATURCLAD-B F Panels.

8mm thick NATURCLAD-B F High Pressure Laminate (HPL) panels of nominal max. dimensions of 8 ft. (2440mm) in length and 4 ft. (1220mm) in height. The panels are attached to the vertical J- and H-section stud profiles using A2 stainless-steel screws of Ø5.5mm × 30mm dimensions, placed at the top, middle, and bottom of the panel at each J- and H-section stud. Vertical joints must be placed over H-section studs. The panels must be installed with a max. of 8mm open vertical and horizontal joints.

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.