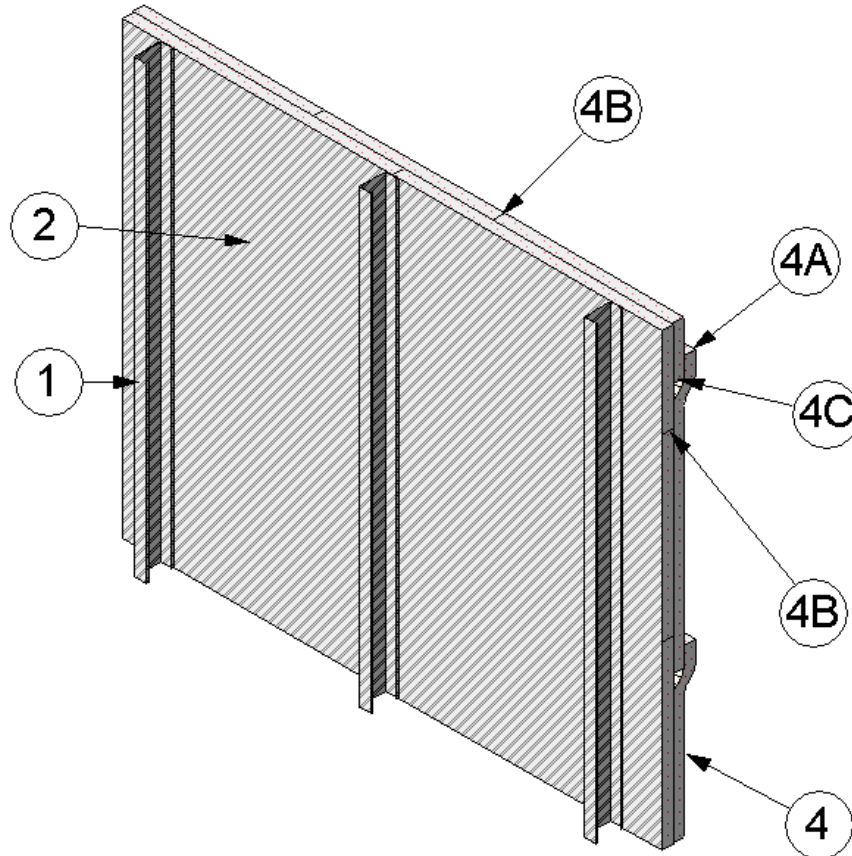


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Unifrax I LLC  
Design No. UNI/WA 120-01 (Formerly OPL Design No. NBW 338)  
Non-Bearing Wall  
FyreWrap Elite 1.5 or  
FyreWrap 1.5 or  
FyreWrap Max 2.0  
ASTM E119-08a  
Assembly Rating: 2 hr

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1. **STEEL FRAMING** - Use minimum 20 gauge 3-5/8 inch galvanized steel studs spaced maximum 30 inches on center into 20 gauge galvanized steel runners at the top and bottom. Secure steel studs into place with sheet metal screws.
2. **STEEL PANELS** - Clad Steel Framing (Item 1) with a single layer of minimum 16 gauge sheet steel, attached to the studs. Stitch-weld the steel Panels to

Steel Framing (Item 1). Use minimum 1 inch welds spaced minimum 12 inches on center. Weld the seams of each piece of sheet steel along the entire joint which was centered over each stud.

3. **FASTNERS** - (Not Shown) Affix minimum 5 inch long 10 gauge stainless steel impaling pins to face of the Steel Panels (Item 2). Apply the pins with a

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**07 21 16 Blanket Insulation**

capacity discharge welder. Comply with all pin placement requirements.

- A. Edge Pins - Place pins 2 inches from the edge of the perimeter of the wall. Space pins maximum 10-1/2 inches on center along vertical edges and maximum 12 inches on center along horizontal edges.
- B. Stud Pins – Place pins at every other stud location. The first field pin on the studs is 7 inches from the bottom edge pin on the wall and then 10-1/2 inches on center in between the ends of the stud.
- C. Overlap Pins - Place pins at all insulation overlaps. Place pins maximum 12 inches on center.
- D. Insulation Pins – Place pins 10-1/2 ± 1 inches on center between rows of overlap pins. After the Insulation (Item 4) is placed over the impaling pins, secure the wrap in place to the pins with galvanized steel speed washers. Locate pins in the middle of the overlap. Secure blanket to pins with 1-1/2 in. square or round galvanized steel speed clips. Turn down or cut off insulation pins that extend beyond the outer blanket wrap layer.

**4. CERTIFIED MANUFACTURER: Unifrax I LLC**

**CERTIFIED PRODUCT:** Blanket Insulation

**MODEL:** FyreWrap Elite 1.5, FyreWrap 1.5 or FyreWrap Max 2.0

**INSULATION** - Cover the Steel Panels (Item 2) with two layers minimum 1-1/2 inch thick by minimum 24 inch wide insulation with a nominal density of 6 pcf for FyreWrap Elite 1.5 or 8 pcf for FyreWrap 1.5 or FyreWrap Max 2.0. Place the inner layer of insulation horizontally. Butt and compress the edge a minimum 1-1/2 inch of each

adjacent run of insulation to the preceding run. Tape all butt joints (4B) with min. 4-in. wide aluminum foil tape, centered over the joint. Place the outer layer starting from the top down so that the horizontal edge is minimum 4 inches from the horizontal edges of the inner layer. Position all outer layer joints minimum 4 inches from inner layer joints. Overlap the exposed edge of next run (4A) 3 inches onto the starting edge of the preceding run (4C).

- 5. **ACCESS DOOR** – (Not Shown) When required, mark and cut a clean-out access opening into the wall at desired location after the duct is insulated. Cut a 12 inch x 12 inch opening in the Insulation system (Item 4). Cut a 10 inch by 10 inch opening into the wall so that a 1 inch clearance is maintained around the perimeter of the opening and the insulation system. Cut a 13 inch x 13 inch 16 gauge plate to be used as a door. Place a minimum 1/2 inch thick ceramic fiber gasketing between the door and the opening. Secure the door to the duct using either of two methods. Method 1 – Attach with eight 3/4 inch self-drilling sheet metal screws. Place one screw in each of the four corners of the door at a maximum 1/4 inch from the edges of the door. Place one screw at the midpoint on each side of the door a maximum 1/4 inch from the edge. Method 2 - Weld four 4 inch by 1/4 inch all-thread rods to the duct, one at each corner of the duct so that they are 11 inches on center. Cut a 13 inch by 13 inch 16 gauge plate to be used as a door. Drill holes in the door to match the rod pattern and seal the duct by overlapping the opening by 1-1/2 inches on all sides. Place the door over the threaded rods. Weld four 7 inch long, 10 gauge stainless steel insulation pins to the access door corners so that the pins are 9 inches on center. Apply three layers of Insulation (Item 4) over the access door. Cut the first layer into a 13 inch by 13 inch square and install it over the pins and covering the door. Cut the second layer into a 15 inch by 15 inch square and install it over the pins and covering the first layer so that a 1 inch

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**07 21 16 Blanket Insulation**

overlap exists. Cut the third layer into a 17 inch by 17 inch square and install it over the pins and covering the first layer so that a 1 inch overlap exists. Secure blanket to pins with 1-1/2 inch square or round galvanized steel speed clips. Turn down or cut off insulation pins that extend beyond the outer blanket wrap

**Page 3 of 3**

layer. Secure the access door assembly by placing steel tubing over the threaded rod, then apply washers and wing nuts over the threaded rod.