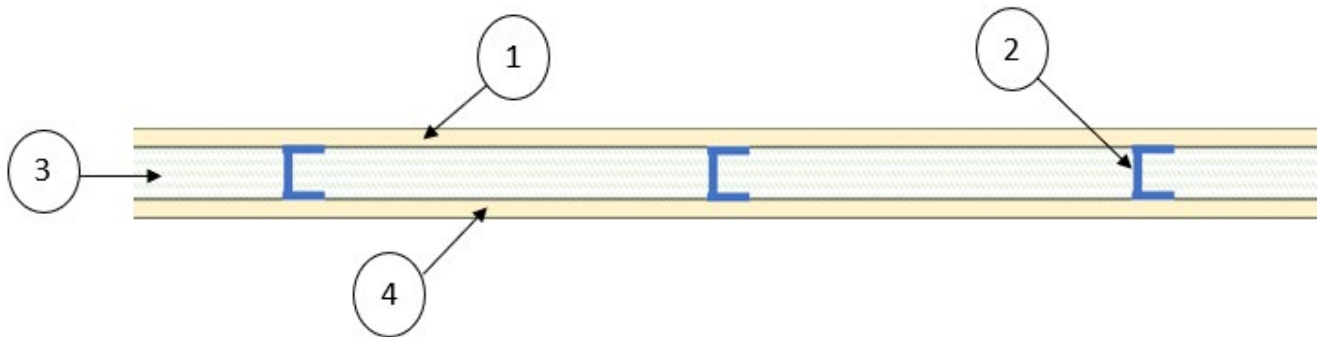


**Alpha Polymers, LLC**  
**Design No. APM/FI 30-01**  
**Spray-Applied Polyurethane Foam**  
**AP 100 (OC) SPF Insulation**  
**NFPA 285**  
**Rating: Meets Requirements**



- 1. GYPSUM BOARD:** Install min. 5/8 in. nominal thickness Type X gypsum board oriented with long dimension perpendicular to vertical framing and offset vertical joints. Attach to framing using #6 x 1-1/4 in. long bugle-head screws spaced vertically 12 in. on center (oc) and 3/8 in. to 5/8 in. from edges of boards.
- 2. FRAMING:** Install max. 6 in. deep and min. 3-5/8 in. deep, min. 20 GA galvanized steel studs and track, with studs spaced max. 24 in. oc. Secure steel studs horizontally to top and bottom tracks using #2 - 8 x 1/2 in. self-drilling zinc-plated screws. In the stud cavity at the floor line, apply a min. 4 in. thick, 4 pcf mineral wool as fire stopping material.
- 3. SPRAY-APPLIED POLYURETHANE FOAM:**  
  
**CERTIFIED PRODUCT:** Alpha Polymers, LLC, AP 100 (OC)  
  
Spray-apply the AP 100 (OC) insulation to partially fill or to fully fill the steel stud cavity.
- 4. EXTERIOR SHEATHING:** Install ASTM C1177 compliant, min. 5/8 in. nominal thickness, Type X Glass Mat Gypsum Sheathing oriented with long dimension perpendicular to vertical framing and offset vertical joints. Attach to framing using #6 x 1-1/4 in. long bugle-head screws spaced vertically 12 in. oc and 3/8 in. to 5/8 in. from edges of boards.
- 5. EXTERIOR CLADDING (Optional, Not Shown):** Apply any of the following non-combustible claddings to the exterior:
  - A. **BRICK AND BRICK TIES/ANCHORS** – Install nominal 4 in. thick clay brick or veneer with max. 2 in. air gap, with brick ties/anchors spaced max. 16 in oc vertically and max. 24 in. oc horizontally (aligned with framing).
  - B. **STUCCO** – Install min. 3/4 in. thick exterior cement plaster and lath.
  - C. **NATURAL STONE (GRANITE, LIMESTONE, MARBLE, SANDSTONE)** – Install min. 2 in. thick natural stone using an approved installation technique with a max. 2 in. air gap.

- D. ARTIFICIAL CAST STONE – Install min. 1-1/2 in. thick artificial cast stone using an approved installation technique with a max. 2 in. air gap.
- E. TERRA COTTA – Install min. 1-1/4 in. thick terra cotta cladding using an approved installation technique with a max. 2 in. air gap.
- F. CONCRETE – Install min. 2 in. thick concrete with a max. 2 in. air gap.
- G. GLASS FIBER-REINFORCED CONCRETE PANELS – Install min. 1/4 in. thick panels per manufacturer's instructions.
- H. CMU BLOCKS – Install min. 4 in. thick blocks with max. 2 in. air gap.
- I. SHEET METAL – Install sheet metal cladding including steel, aluminum, copper, or zinc.

- 6. WATER-RESISTANT BARRIER (Optional, Not Shown):** Install a WRB under ASTM E136 compliant, non-combustible, min. 2 in. thick, min. 4 pcf mineral wool, with any of the approved exterior claddings.

Alternatively, install a WRB that complies with the following performance and installation requirements:

- ASTM E1354 Performance:  
Peak heat release rate less than 150 kW/m<sup>2</sup>, and effective heat of combustion less than 18 MJ/kg when tested in the horizontal orientation at an incident radiant heat flux of 50 kW/m<sup>2</sup>
- ASTM E84 or UL 723 Performance:  
Flame Spread Index not to exceed 25, and Smoke Developed Index not to exceed 450
- When used in combination with stucco, use min. 7/8 in. thick exterior cement plaster and lath
- When used in combination with sheet metal, use min. 0.0149 in. thick steel only.

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.*