

PWA-105 General design

This assembly is applying a continuous layer of rigid foam, preferably EPS, over the basecoat of cement plaster. The assembly is highly crack and water resistant. While this assembly appears to be an EIFS over cement plaster, it is not. It is recommended to use products manufactured by a firm that is a member of EIMA to insure satisfactory results. There are allowable design options that can keep PWA -105 affordable.

- No control joints required
- Brown coat does not need to be floated
- No finish coat over cement
- EPS for this assembly can be lower in cost

Fire ratings: for PWA-105 is maintained when the rigid foam used can meet certain criteria of Chapter 26 of the International Building Code. The criteria established herein are intended to keep the combustible fuel level below the maximum limits allowed by established fire and building codes.

- Smoke Develop index of not more than 450
- Flame Spread index 25 or less
- Maximum Thickness – 4 inches, averaged over the wall surface
- Foam shapes may be added, provided the average thickness for the wall does not exceed 4 inches.
- The terminations of foam must be encapsulated by the lamina

Moisture Management: This assembly is constructed as any generic cement plaster assembly, additional water protection is added with the foam (CI) and the lamina used to cover the foam. The likelihood of moisture even reaching the sheathing through the field is extremely low.

Flashings and the water-resistant barrier(s) are still critical at any and all penetrations to prevent moisture intrusion.

Framing: Spacing at 24 inches on center is acceptable, 16 inches on center if sheathing is eliminated. The design base thickness for steel framing shall not be less than 0.0346 mils (20 gauge structural) and the deflection criteria should be a minimum $L/360$.