

TECHNICAL BULLETIN

NFPA 285 TEST SUMMARY

Table I - Walls Containing STYROFOAM™ XPS Insulation

Wall Component	Materials
Base wall system - Use either 1, 2 or 3	1 - Concrete wall 2 - Concrete Masonry wall 3 - 1 layer - 5/8-inch thick, Type X, Gypsum wallboard on interior, installed over steel studs: minimum 3 5/8-inch depth, minimum 20-gauge at a maximum of 16-inch OC with lateral bracing every 4 ft. vertically
Floorline Firestopping	4 lb/cu ft. mineral wool (e.g. Thermafiber) in each stud cavity and at each floorline - attached with Z-clips or equivalent
Cavity Insulation - Use either 1, 2 or 3	1 - None 2 - Fiberglass batt insulation (faced or unfaced) 3 - Any noncombustible insulation (faced or unfaced)
Exterior sheathing - Use either 1, 2 or 3	1- None 2 - 1/2-inch thick, exterior type gypsum sheathing 3 - 5/8-inch thick, Type X, exterior type gypsum sheathing
Weather-resistive barrier applied to gypsum sheathing - Use either 1 or 2	1 - None 2 - Any shown in Table II
Exterior insulation	1 - STYROFOAM™ Type IV or Type X per ASTM C578 - Total thickness to be a minimum of 1/2 inch to maximum of 3 inches when installed using Special Conditions (see below)
Sealing of exterior insulation	Optional, seal all exterior insulation joints and as option veneer tie penetrations with either: a) Dow LIQUIDARMOR™ - CM Flashing and sealant - max. 60-mil wet thickness, max. 5-inch width b) Acrylic, asphalt or butyl-based sealing tape - max. 4-inch width
Weather-resistive barrier applied to exterior insulation Use either 1 or 2	1- None 2 - Any shown in Table III
Exterior Veneer - Use either 1, 2, 3, 4 or 5	1 - Brick - Standard nominal 4-inch thick, clay brick. Brick veneer anchors - standard types - installed maximum 24 inches OC vertically on each stud. Maximum 2-inch air gap between exterior insulation and brick 2 - Concrete - 2 inches thick or greater. Maximum 2-inch air gap between exterior insulation and concrete. Any standard non-open-joint installation technique can be used 3 - Concrete masonry units - 4 inches thick or greater. Maximum 2-inch air gap between exterior insulation and CMU 4- Stone Veneer - Minimum 2-inch thick, Limestone or natural stone veneer or minimum 1-1/2 inch thick cast artificial stone veneer. Any standard non-open-joint installation technique such as shiplap, etc., can be used 5- Terracotta cladding - Use any terracotta cladding system in which terracotta is minimum 1-1/4 inch thick. Any non-open-joint installation technique such as shiplap, etc., can be used
Special Conditions	Use any header treatment shown in Figures 1 - 5 for all window and door openings in wall
Flashing of window, door and other exterior wall penetrations	As an option, flash window, door and other exterior penetrations with either: a) Dow LIQUIDARMOR™ - CM Flashing and Sealant - max. 60-mil wet thickness, max. 12-inch width b) Limited amounts of acrylic, asphalt or butyl-based flashing tape - max 12-inch width

Table II - Allowed Weather-resistive Barriers

Weather-resistive Barrier - Over Sheathing and Under Foam Insulation
<ul style="list-style-type: none"> • AIR-SHIELD LMP (Gray) • AIR-SHIELD LMP (Black) • AIR-SHIELD TMP • AIR-SHIELD LSR

Table III - Allowed Weather-resistive Barriers

Installed Over Foam Insulation
Dow Chemical - <ul style="list-style-type: none"> • WeatherMate™ • WeatherMate™ Plus
DuPont - <ul style="list-style-type: none"> • Tyvek® CommercialWrap® • DuPont™ Tyvek® CommercialWrap® • DuPont™ Tyvek® CommercialWrap® D • DuPont™ Tyvek® ThermaWrap™
Pactiv - <ul style="list-style-type: none"> • Green Guard®Max Building Wrap
VaporShield - <ul style="list-style-type: none"> • RevealShield™ • RevealShield SA™

Note: all barriers to be installed at indicated or recommended application rates and per manufacturer's installation instructions.

Engineering evaluation by Hughes Associates.