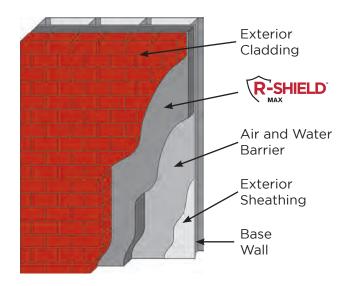


# NFPA 285 ASSEMBLIES

Building codes are established to provide structural, fire, and life safety requirement for all buildings. Building codes have specific requirements for materials, insulation, structural, and fire performance.

A key building code requirement is providing NFPA 285 compliant wall assemblies. Numerous assemblies which include R-Shield® MAX as an insulation component have successfully passed the rigorous NFPA 285. The NFPA 285 test results along with engineering analysis by leading fire consultants provide for the use of a wide range of exterior wall designs for NFPA 285 compliant assemblies incorporating R-Shield MAX.



### WALL ASSEMBLIES WITH R-SHIELD MAX EXTERIOR CONTINUOS INSULATION (CI)

#### **Base Wall Options**

- 1. Cast Concrete Wall
- 2. CMU Concrete Wall
- 3. Steel Stud Framed Wall
  - a. 25 GA. (min.) 3 5/8" (min.) steel studs spaced 24" o.c. (max.)
  - b. Lateral Bracing Every 4 ft. vertically
  - c. 5/8" Type X Gypsum Wallboard Interior
  - d. Cavity Insulation
    - i. None
    - ii. Any Class A, B, or C Fiberglass batt insulation (faced or unfaced)
    - iii. Any noncombustible insulation
  - e. Any 1/2" (min.) Exterior Gypsum Sheathing

## Water Resistive Barrier / Air Barrier Options Over Base Wall

- 1. None
- 2. BASF Enershield HP
- 3. BASF Enershield I
- 4. Carlisle Barritech NP
- 5. Carlisle Barritech VP

- 6. Dupont Fluid Applied WB
- 7. Dupont Tyvek Commercialwrap (1 or 2 layers)
- 8. Grace Perm-A-Barrier VPS
- 9. Tremco EXOAir 230

#### **R-Shield MAX Exterior Insulation Options**

- 1. 7" (max.) R-Shield MAX 150
- 2. 5-1/4" (max.) R-Shield MAX 250

#### **Exterior Cladding Options**

- 1. Brick Nominal 4" clay brick or veneer with 2" (max.) air gap behind the cladding. Brick with ties/anchors 24" o.c. (max.)
- 2. Concrete 2" (min.) with 2" (max.) air gap behind the cladding
- 3. Concrete Masonry Units 4" (min.) with 2" (max.) air gap behind the cladding
- 4. Limestone 2" (min.) with non-open joints installation technique such as shiplap
- 5. Natural Stone Veneer 2" (min.) with non-open joints installation technique such as shiplap
- 6. Precast Artificial Stone 1-1/2" (min.) complying with ICC-ES, AC 51 with non-open joint installation technique
- 7. Terra Cotta Cladding 1-1/4" (min.) solid with non-open joint installation technique such as shiplap
- 8. Stucco 3/4" (min.) exterior cement plaster and lath

#### **Fire Stopping at Floor Line Options**

1. Mineral wool fiber fire stop in each stud cavity at floor line. Thickness equal to stud cavity depth. Follow manufacturer instruction for installation.

#### Window Header Detail

- 1. 25 GA. (min.) sheet metal (steel) flashing with 1" thick, 4 pcf mineral wool over interior of sheet steel
- 2. Header design equal or better than item 1

