Technical Bulletin



NFPA 285 Wall Assemblies

MasterSeal® AWB | Extruded Polystyrene/Expanded Polystyrene/Neopor GPS Plus Rigid Insulation Board | Non-Combustible Cladding

Note: This is a summary of various wall assemblies that meet the requirements of NFPA 285.

WALL COMPONENTS	MATERIALS
Base Wall System - Use either 1, 2 or 3	 Concrete wall Concrete Masonry wall. 1 layer - 5/8-inch interior gypsum board over: 3-5/8-inch deep, 20 GA galvanized steel studs, 24-inch O.C.
Floorline Fire Stopping	4 lb/cu ft. mineral wool (e.g. Thermafiber) in each stud cavity at each floorline
Cavity Insulation – Use either 1, 2 or 3	1. None 2. Any non-combustible insulation (faced or unfaced) 3. Fiberglass Batt (faced or unfaced)
Exterior Sheathing - Use either 1, 2 or 3	 None (if concrete wall or masonry wall) 1/2-inch thick exterior gypsum sheathing (for Base Wall System 3 above) 5/8-inch thick Type X exterior gypsum sheathing (for Base Wall System 3 above)
Water-Resistive/Air Barrier Applied to Exterior Sheathing, Concrete or Masonry – Use either 1 or 2	 MasterSeal AWB 660 MasterSeal AWB 660 I MasterSeal AWB 665
Exterior Continuous Insulation – Use either 1 or 2	 Extruded polystyrene (XPS) foam plastic insulation – ASTM C578, Type IV, maximum 3-inch thickness Expanded polystyrene (EPS) foam plastic insulation – ASTM C578, Type II, maximum 4-inch thickness BASF Neopor® GPS Plus Rigid Insulation Board – ASTM C578, Type II (1.45 pcf), maximum 4-inch thickness
Sheathing Joints / Flashing	 4-inch wide MasterSeal AWB installed over all horizontal and vertical joints, embedded in MasterSeal AWB 660, 660 l, or 665. MasterSeal AWB 900 installed over all horizontal and vertical joints
Exterior Wall Covering - Use either 1, 2, 3, 4 or 5	 Brick – Standard type brick veneer anchors, installed a maximum 24-inches on center, vertically on each stud with maximum 2-inch air gap between exterior insulation and brick. Brick to be standard nominal 4-inch thick clay brick installed in a running bond pattern using Type S mortar Stucco – Minimum ¾-inch thick, exterior cement plaster and lath Minimum 2-inch thick natural stone (granite, limestone, marble, sandstone). Any standard non-open jointed installation technique can be used Minimum 1-½ inch thick concrete masonry unit (CMU), pre-cast concrete, or artificial cast stone. Any standard non-open jointed installation technique can be used Minimum 1-½ inch thick Terra Cotta non-open jointed. Any standard non-open jointed installation technique can be used

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