

SPECIFICATION WRITING NOTES

The Icynene Insulation System®

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The following notes related to Section 07214 – Polycynene Pour Fill Formula Insulation and Section 07218 – Polycynene Spray Formula Insulation are intended to aid the specification writer in preparing a coordinated set of construction specifications. The specification writer should take specific project conditions into consideration when implementing any of the notes. Consult your local representative for assistance when editing the section.

These sections contain articles related to the U.S. Green Building Council's LEED (Leadership in Energy & Environmental Design) Green Building Rating System. The LEED System defines what a "green" building is. Through the process of attaining credits for using recommended strategies, a building can achieve certification as a green building. Icynene can also contribute to achieving various LEED prerequisites and credits. See manufacturer's Icynene and LEED Information Sheet for more information.

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1. Limitations on Use of Materials: Polycynene insulation shall not be installed on the exterior of the building below grade, in contact with water, in service environments above 180°F (82°C), above roofing membranes, within two (2) inches (50 mm) of heat emitting devices where the temperature is in excess of 200°F (93°C), or as an interior finish.
2. Use of Spray Formula vs. Pour Fill Formula: Specify the spray-applied formula where the insulation is to be installed in an open cavity vertically, overhead, or at an inclination.
3. In wood framed construction, specify the following requirements in the Carpentry section of Division 6 Wood and Plastics of the specifications:
 - a. Specify that all new foundation sill plates and floor/wall junction plates are installed with foam gaskets to prevent air leakage or specify the caulking of these joints on the interior of the building in the joint sealant section of the specifications.
 - b. Specify that all rough size openings for new exterior doors and windows be sized to furnish a minimum 1/2 inch (12.5 mm) space around the perimeter of the door and/or window frame to permit the installation of the foam insulation.
4. In the appropriate section of Division 7 Thermal and Moisture Protection, specify the following requirements:
 - a. Specify the installation of a vapor retarder to meet the requirements of the local governing codes.
 - b. Specify the installation of a vapor retarder on ceilings that will be caulked and stapled to the top plates of interior partitions and to the lower top plates of exterior walls.
 - c. Specify the caulking of all joints between adjacent exterior framing members, between multiple studs and at other critical locations where the installation of insulation is not possible.

5. In the appropriate section of Division 9 Finishes, specify the following requirements:
 - a. Specify the installation of drywall or other acceptable thermal barrier over the insulation where exposed to livable areas.
 - b. Specify the repair of cavity fill application holes through interior/exterior finishes.
6. In the appropriate plumbing section of Division 15 Mechanical, specify the following requirements:
 - a. Specify that all cleanouts and valves be identified in order to avoid the installation of insulation at these locations.
 - b. Specify that all plumbing stacks which penetrate the exterior walls and/or ceilings are cut in so as to provide a minimum ½ inch (12.5 mm) space around the stack to permit the installation of insulation.
 - c. Specify that all PVC or ABS pipe of three (3) inches (75 mm) or less in diameter must be braced every three (3) feet (1 m) to prevent excessive deflection by the expanding foam.
7. In the appropriate heating/air conditioning sections of Division 15 Mechanical, specify the following requirements:
 - a. Specify that all damper controls be identified in order to avoid the installation of insulation at these locations.
 - b. Specify that all combustion appliances are either provided with a venting relief safety switch or are uncoupled from the building envelope such that pressure imbalances across the envelope do not interfere with combustion and/or make-up air supply to the combustion chamber.
8. In the appropriate ventilation section of Division 15 Mechanical, specify the following requirements:
 - a. Ensure that the building is designed with adequate mechanical ventilation to meet the requirements of the local governing codes.
 - b. Ensure that the heating and ventilation system is properly designed and balanced so that there is no risk of back draft of combustion appliances and that adequate air changes is achieved.
9. In the appropriate section of Division 16 Electrical, specify the following requirements:
 - a. Specify that all new vertical wiring must be secured to the inside of studs every three (3) feet (1 m).
 - b. In retrofit applications, specify that all existing wiring that is not to be abandoned is not to be insulated over in accordance applicable electrical codes.
 - c. Specify that all ceiling fixtures be installed using vapor barrier pans/boxes which are caulked with acoustical caulking material or specify that all ceiling fixtures are sealed using a suitable sprayed foam material prior to the installation of attic insulation.
 - d. Specify that all wiring systems such as cable TV, telephone, security systems and intercoms shall be mechanically fastened to the inside of studs every three (3) feet (1 m) for vertical runs, and 1-1/2 inches (40 mm) from the gypsum board surface for all runs.

END OF SPECIFICATION WRITING NOTES