DIVISION: 09 00 00—FINISHES
SECTION: 09 60 00—FLOORING

REPORT HOLDER:

AMVIC INCORPORATED

EVALUATION SUBJECT:

AMDRY (INSULATED SUB-FLOOR SYSTEM)
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AMDRY (INSULATED SUB-FLOOR SYSTEM)

1.0 EVALUATION SCOPE  
Compliance with the following codes:  
2015, 2012 and 2009 International Residential Code® (IRC)  
Properties evaluated:  
■ Physical properties  
■ Surface-burning characteristics

2.0 USES  
AmDRY subfloor panels are intended to be installed directly onto concrete slab-on-grade floors in residential buildings of non-fire-resistance rated construction under the IRC. The panels may be left exposed or have a finished floor covering complying with requirements of the applicable code applied to the exposed surface.

3.0 DESCRIPTION  
AmDRY panels are a factory-fabricated, 24-inch-wide-by-48-inch-long (610 mm by 1219 mm), composite subfloor panels consisting of the following components:

3.1 Insulation:  
A layer of expanded polystyrene (EPS) foam plastic insulation board complying with ASTM C578 as Type II having a minimum density of 1.35 pounds per cubic foot (22 kg/m³). The EPS is produced in thicknesses of 1, 2 and 2 1/2 inches (25.4, 51 and 64 mm) and is configured with a grid of 1/2-inch-wide-by-1/2-inch-deep square grooves spaced 3 1/8 inches on center on the unexposed face. The EPS has a flame spread index of 75 or less and smoke-developed index of 450 or less when tested in accordance with ASTM E84 (UL 723).

3.2 Wood Panel:  
A surface layer of 19/32-inch-thick (15.1 mm) oriented strand board (OSB) is laminated to the EPS described in Section 3.1. The edges of the OSB panels are grooved to accept the AmDRY connectors described in Section 3.5.

3.3 Adhesive:  
A polyurethane, hot-melt adhesive is used to laminate the EPS and OSB together.

3.4 Coating:  
A polystyrene surface film is applied over the grooved face of the EPS to separate the surface of the EPS from the concrete slab-on-grade.

3.5 Connectors:  
Preformed polyvinylchloride connectors designed with flexible barb legs that are inserted into the grooves in the edge of the OSB panels to connect the panels to each other.

4.0 DESIGN AND INSTALLATION  
The concrete floor slab on which the panels are to be installed must be level and any major holes or uneven areas must be repaired in accordance with the manufacturer's installation instructions. The AmDRY panels are installed one row at a time. The edges of the perimeter panels are separated from the walls of the space by use of 1/2-inch-wide (12.7 mm) wood spacer blocks. The panels are secured to each other using the AmDRY connectors inserted into the end of each adjoining AmDRY panel. Once a row of panels is installed, connectors are inserted into the side of the row of panels, and the next row is set in place with the joints in the next row of panels staggered from the joints of the panels in the previous row. The end panels of each row may be cut to fit the size of the room size. After all panels are installed, the wood spacer blocks that were placed around the perimeter may be removed or left in place depending on the type of finished flooring to be installed over the surface of the panels.

5.0 CONDITIONS OF USE  
The AmDRY subfloor system described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The use of the panels is limited to installation over concrete slab-on-grade floors in residential buildings of non-fire-resistance rated construction under the IRC. Utilities are not permitted to be installed under the panels or between the underside of the panels and the concrete slab.

5.2 The use of the panels is limited to applications where the design floor live load does not exceed 40 pounds per square foot (195 kg/m²). Evaluation for resistance to dead loads is outside the scope of this report.
5.3 The thermal resistance of the system is outside the scope of this report.

5.4 The evaluation of floor covering materials installed over the panels is outside the scope of this report.

5.5 The EPS foam plastic insulation and the AmDRY panels are produced at the Amvic, Incorporated, facility in Toronto, Ontario, Canada, under a quality control system with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED


6.2 Reports of testing in accordance with ASTM E84 (UL 723) for the EPS core and the coated EPS panels.

6.3 Quality documentation.

7.0 IDENTIFICATION

7.1 The EPS foam plastic insulation is labeled with the manufacturer's name (Amvic, Inc.) and address, the date of manufacture, the evaluation report number (ESR-3426), the density or type and the surface-burning characteristics.

7.2 The report holder’s contact information is the following:

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