DIVISION: 09 00 00—FINISHES
Section: 09 77 00—Special Wall Surfacing

REPORT HOLDER:
TEMO, INC.

EVALUATION SUBJECT:
TEMO BASEMENT FINISHING SYSTEM

1.0 EVALUATION SCOPE
Compliance with the following codes:
- 2006 International Building Code® (IBC)
- 2006 International Residential Code® (IRC)

Properties evaluated:
- Surface-burning characteristics
- Interior finish stability at elevated temperatures

2.0 USES
The Temo Basement Finishing System is used as an interior finish material to cover existing concrete or masonry basement walls.

3.0 DESCRIPTION
The Temo Basement Finishing System consists of a nominally \( \frac{1}{4} \)-inch-thick (6 mm), fiber-reinforced magnesium-oxide-based panel, identified as DRAGONBOARD, with 4-mil-thick (0.101 mm) vinyl factory-laminated to the side of the panel to be exposed to the interior of the building (basement). A \( \frac{3}{8} \)-inch-thick (86 mm), 1 pcf (16 kg/m\(^3\)), expanded polystyrene (EPS) insulation board manufactured by AFM Corporation (ESR-1006) is factory-adhered to the opposite side of the fiber-reinforced panel and covered with a 0.05-inch-thick (1.3 mm), utility-grade acrylonitrile butadiene styrene (ABS) sheet. The adhesive used to factory-adhere the panel components together is Isogrip® (ESR-1140). The finished wall panels are 48 inches wide by 96 inches high (1219 mm by 2438 mm). Other components of the wall system are PVC panel splines, base channels, wall caps, wall angle adapters, cap receivers, self-adjusting wall mount brackets and base moldings.

The finished wall panel system meets the requirements for a Class A interior wall finish in accordance with Section 803.1 of the IBC and conforms to the flame-spread and smoke-density requirements in Section R315 of the IRC, when tested in accordance with ASTM E84.

4.0 INSTALLATION
The Temo Basement Finishing System must be installed in accordance with the Temo, Inc., published installation instructions, the applicable code and this report. See Figure 1. All electrical, mechanical and plumbing work must be in accordance with the applicable code and is subject to approval of the code official.

4.1 Fastening Base Channel to Existing Wood Floor:
The base channel must be attached to wood floor substrate using approved No. 10 by \( \frac{1}{2} \)-inch (32 mm) wood screws spaced every 18 to 24 inches (457 to 610 mm) on center.

4.2 Fastening Base Channel to Existing Concrete Slab:
The base channel provides vertical support for the wall panel and must be attached to concrete floors with \( \frac{3}{16} \)-inch-by-\( \frac{1}{4} \)-inch-long (5 mm by 32 mm) concrete anchors spaced every 18 to 24 inches (457 to 610 mm) on center.

4.3 Fastening Self-adjusting Brackets to Concrete or Concrete Masonry Walls:
The brackets are attached to concrete or concrete masonry walls using \( \frac{3}{16} \)-inch-by-\( \frac{1}{4} \)-inch-long (5 mm by 32 mm) concrete anchors through predrilled anchor holes provided in the brackets.

4.4 Panel Installation:
Each wall panel is slid into place with the top of panel supported by the self-adjusting wall-mount bracket and the panel bottom supported by the base channel. Each vertical panel edge is supported by a PVC panel spline that extends from the bottom channel to the top bracket. The concealed space between the basement wall and the panel system must be provided with an approved fire-blocking material and draft-stopping material in accordance with the applicable code.

5.0 CONDITIONS OF USE
The Temo Basement Finishing 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 Installation of the Basement Finishing System must be in accordance with this report, the applicable code and the manufacturer’s published installation instructions. In the event of a conflict between the manufacturer’s published installation instructions and this report, this report governs.
5.2 Installation is limited to interior use in Type V-B construction under the IBC and non-fire-resistance-rated construction in dwellings under the IRC.

5.3 Attachment of the self-adjusting top mount brackets used with the Basement Finishing System is limited to concrete and concrete masonry walls.

5.4 Concealed electrical, mechanical or plumbing components must be installed, and inspected to verify compliance with the applicable code, prior to the installation of the Basement Finishing System.

5.5 Concealed spaces must be draft-stopped and fire-blocked in accordance with IBC Section 717 or IRC Section R502.12, R502.13 or R602.8, as applicable.

5.6 The Basement Finishing System installation must maintain compliance with emergency escape and rescue opening requirements of IBC Section 1026 and IRC Section R310, when applicable.

5.7 The Basement Finishing System is manufactured in Clinton Township, Michigan, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

6.1 Manufacturer's published installation instructions.

6.2 Reports of thermal barrier fire tests in accordance with NFPA 286.

6.3 Reports of tests in accordance with ASTM E84.

6.4 Reports of panel stability testing at 300°F (149°C) for 30 minutes.

6.5 Quality documentation in accordance with the ICC-ES Acceptance Criteria for Quality Documentation (AC 10).

7.0 IDENTIFICATION

7.1 The Temo Basement Finishing System components bear a label indicating the Temo, Inc., name and address, the product name and the evaluation report number (ESR-2716).

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

TEMO, INC.
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FIGURE 1—TEMO BASEMENT FINISHING SYSTEM