



# Floor Protectors and Wall Shields

Providing thermal protection for fuel burning appliances

*Floor protectors, also referred to as hearth extensions, and wall shields are used in conjunction with heat producing appliances such as fireplaces, fireplace stoves, fireplace inserts, and solid-fuel type room heaters to protect adjacent combustible construction. Model codes include requirements covering the installation of these products. UL certifies products for use in these applications.*



## Certifications

Floor protectors and wall shields are certified (Listed) under the Floor Protectors and Wall Shields category (DFCV). Information on these certifications can be found in the Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database). Certified products include a UL Listing Mark that indicates “Floor Protector”, “Wall Shield”, or “Floor Protector and Wall Shield”.

These products are intended for use with Listed solid-fuel heat-producing appliances for the reduction of the surface temperature of combustible floor and wall construction materials, respectively. They should be installed in accordance with the installation instructions provided with each product.

Floor protectors are placed over combustible floor-construction materials beneath and adjacent to Listed fireplace stoves,

solid-fuel room heaters, factory-built fireplaces, and fireplace inserts where reference to the Listed floor protector is specified. Floor protectors are identified as either Type 1 or Type 2 in the individual Listings.

Type 1 (ember) floor protectors are for use in applications not requiring thermal protection of the combustible floor. Type 2 (thermal) floor protectors are for use in applications requiring thermal protection of the combustible floor.

Wall shields are placed over combustible wall-construction materials for the purpose of reducing the clearance to combustible materials from that required for individually Listed appliances and equipment, except when the appliance or equipment listing specifically prohibits the reduction of clearances. The reduced wall clearances are specified as a



## Floor Protectors and Wall Shields (continued)

percentage in the individual Listings. Wall shields are not intended to reduce clearances to less than 12 inches or for reducing clearances when the clearance specified by the appliance and/or chimney-connector Listing is 12 inches or less. However, clearances less than 12 inches are allowed when the specific appliance and chimney connector system has been tested and labeled together with a specific wall shield at the clearances specified in the appliance's installation instructions.

### Standard for Safety

The UL 1618 Standard for Safety for Wall Protectors, Floor Protectors, and Hearth Extensions is used to investigate these products. Among other things, the standard includes accelerated aging, thermal resistivity, radiant panel, burning brand, and impact and strength tests. It also includes a reduced clearance test for wall protectors as well as construction, marking, and installation instruction requirements.

### Model code applications

The installation of floor protectors and wall shields are covered by codes such as the International Mechanical Code (IMC), International Residential Code (IRC) and the NFPA 211 Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances. Some of the installation requirements covering clearance reductions and hearth extensions are as follows.

**Clearance reductions** — IMC section 308 includes requirements governing the reduction in required clearances to combustible materials and combustible assemblies for chimneys, vents, kitchen exhaust equipment, mechanical appliances, and mechanical devices and equipment. This section allows clearance reductions for products using protective assemblies Listed and labeled in accordance with UL 1618. In order to determine compliance, individual certifications of floor protectors and wall shields indicate the clearance reductions percentage established for each product.

**Hearth extensions** — IMC section 903.2 and IRC section R1004.2 require hearth extensions to comply with UL 1618, be installed in accordance with the listing of the fireplace, and be readily distinguishable from the surrounding floor area.



When reviewing the installation of floor protectors, wall shields and hearth extensions, refer to the individual product certification, markings, and installation instructions to verify the specific application for which the products have been evaluated. This includes details for locating the products and joining multiple protectors and shields.