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INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

IAPMO GUIDE CRITERIA

FOR

LOAD PADS FOR AIR CONDITIONING UNITS

IGC 240-2007

1. PURPOSE

- 1.1** The purpose of this standard is to establish a generally acceptable standard for load pads for residential or commercial air conditioning units for use with air conditioning units. Its purpose is to serve as a guide for manufacturers, distributors, architects, engineers, contractors, inspectors, and installers; to promote understanding regarding materials, manufacture, and support materials used in conjunction with installation; and to provide for identifying load pads for residential or commercial air conditioning units that conform with the standard.
- 1.2** The provision of this standard are not intended to prevent the use of any alternate material or method of construction, provided any such alternate meets the intent and requirements of this document and changes are amended to this standard.

2. SCOPE

- 2.1** This standard covers definition, materials, dimensional tolerances and method of marking or identifying for load pads.
- 2.2** The load pads covered by this standard are intended for use with air conditioning units which are installed at ground level and not on roofs.
- 2.3** The load pads covered by this standard do not prevent their use for evaporative coolers.

3. GENERAL REQUIREMENTS

- 3.1** Load pads shall accommodate a range of sizes of air conditioning units determined by the manufacturer.
- 3.2** Load pads shall have a non-creep surface which allows it to absorb vibration, noise and keeps the equipment in its original position.

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- 3.3 Load pads shall be impervious to climatic variations, water, acids, and petroleum products.
- 3.4 Underside of load pad shall have stabilization ribs as well as a stabilization flange.
- 3.5 The load pad shall be will be injection molded from high impact polypropylene complying with ASTM D4101 and exhibit resistance to impact, ultra violet degradation and weathering when tested in accordance with this standard.
- 3.6 The minimum vertical height of the pad shall be two (2) inches.
- 3.7 The load pad shall be “Drillable” to allow for installation of refrigerator and electrical lines under and through and equipment to be safely secured to pad.
- 3.8 When required, seismic rating for load pad shall comply with Appendix A.1.
- 3.9 When required, flame resistance or rating for load pad shall comply with Appendix A.2.

4. TESTING REQUIREMENTS

- 4.1 **Load Test.** The load pad shall withstand the load test outlined in sections 4.1.1 through 4.1.5 with no evidence of damage or structural deformation or any other structural component.
 - 4.1.1 Install the pad in accordance with manufacturer’s installation instructions. Apply a total load of 1,200 pounds of vertical force to the pad by simultaneously applying 300 pounds force to each of the four corners of the curb. Leave the load in place for 72 hours $\pm$ 1 hour.
 - 4.1.3 Remove the load after seventy-two (72) hours and inspect the pad for visible damage. Remove the mounting screws and disassemble to verify that no hidden damage has occurred.
 - 4.1.4 Reassemble and reinstall the unit and reapply the load as in section 4.1.1 for seventy-two (72) additional hours.
 - 4.1.5 Remove the load after seventy-two (72) hours and inspect the unit for visible damage. Remove the mounting screws and disassemble to verify that no hidden damage has occurred.
- 4.2 **Durability Testing.** The load pad shall comply with all of the following testing requirements listed in Table 1: