



NSF International
Special Engineered Specification
NSF SE 1495

**ABS, PVC, and SS
Residential Floor Drains**





SPECIFICATIONS FOR A SPECIAL ENGINEERED (SE) PRODUCT

NSF SE 1495

ABS, PVC, and SS Residential Floor Drains

1. Purpose:

Currently the ABS, PVC, and SS (Stainless Steel) residential floor drains are not covered by the scope of ASME A112.6.3. ASME A112.6.3 standard includes dimensional requirements for the grates for drains that are used in "building structures, which are typically other than residential" (ASME A112.6.3, Section 1.1).

2. Scope of Specification:

The scope of this specification is to outline the requirements and test methods for in-plant quality control testing, marking, and materials of ABS, PVC, and SS residential floor drains.

3. Application:

ABS, PVC, and SS Drains intended for use in residential applications will have the grate-free area evaluated against the manufacturer's specified dimensions and shall be covered by this SE Document.

4. Referenced Standards:

ASME A112.6.3-2001 Floor and Trench Drains

ASTM D1784 Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds.

ASTM D3965 Standard Specification for Rigid Acrylonitrile-Butadiene-Styrene (ABS) Materials for Pipe and Fittings

CSA B125.1 – Plumbing Fittings

5. Testing Requirements:

5.1 - Dimensions

5.1.1 – Dimensions, Grate – The dimensions of the grate shall be against the manufacturer's specifications. This measurement shall allow the ABS, PVC, and SS Drains to meet the requirements of Section 5 of this specification.

5.1.2 – Dimensions, Body – The dimensions of the Drain shall meet the requirements identified in Section 3.2 / 3.3 of ASME A112.6.3.

5.2 – Top Loading – Classification – These products shall meet the Top Loading requirements identified in Sections 5.1 and 5.2 of ASME A112.6.3.

5.3 – Acrylic Coatings – For residential floor drains that utilize an acrylic coating the following tests shall be required.

5.3.1 – Water Degradation – These products shall meet the water degradation requirements identified in CSA B125.1 Section 5.2.4.2

5.3.2 – Soap and Cleaner Effects – These products shall meet the soap and cleaner effects requirements identified in CSA B 125.1 Section 5.2.4.3

5.3.3 – Falling Sand Abrasion Test – These products shall meet the falling sand abrasion test requirements identified in CSA B 125.1 Section 5.2.4.4

6. Material Requirements

6.1 – Material Properties – ABS – ABS materials used in the production of products against these specifications shall meet a minimum cell classification of 3-2-2-2 when tested against ASTM D3965. The minimum thickness for the mold shall be 5/32 in. (4mm). Inserts for fasteners in plastic drains shall be molded into the plastic material.

6.2 – Material Properties – PVC – PVC materials used in the production of products against this specification shall meet a minimum cell classification of 12454-B, 12454-C, or 14333-C when tested against ASTM D1784. The minimum thickness for the mold shall be 5/32 in. (4mm). Inserts for fasteners in plastic drains shall be molded into the plastic material.

6.3 – Material Properties – SS – SS materials used in the production of products against this specification shall be



Stainless Steel 304 or 316.

7. Marking

The ABS, PVC, or SS Residential Floor Drain shall be marked with the following:

- Name and/or trade mark of the manufacturer
- Mark of the certification agency

8. In-Plant Quality Control Testing

Dimensions shall be performed at start up and continuing on a weekly basis.