



Ultra-Drain Marker[®]

Technical Data Sheet

Scope

This specification covers the material, physical/aesthetic dimensions, and mechanical properties of the Ultra-Drain Marker as manufactured by UltraTech International.

Technical Description, Design, and Material

Ultra-Drain Markers shall be made from cuts of glossy vinyl and protected by a polyurethane dome. The lifespan of the dome, assuming average UV and climate exposure, shall be at least 10 years in an outdoor environment.

Ultra-Drain Markers shall be printed on .030 glossy vinyl and the dome shall be a hardened form of a clear, polyurethane compound.

Ultra-Drain Markers shall be tough, durable, and scuff resistant. They shall be ideal for marking storm drains and buried cable, but shall also be easily applied to any flat, nonporous surface.

Ultra-Drain Markers shall be made into any shape, size, or color so as to fit a nearly universal range of applications.

Dimensions

The Ultra-Drain Markers shall be produced in the following sizes, but shall also be available in any size upon request.

- + 2" Round
- + 2" x 3" Oval
- + 3" Round
- + 3 7/8"

Mechanical Properties

The Ultra-Drain Marker shall have a bottom surface of glossy vinyl with the following mechanical properties:

Property	Test Method (ASTM)	Typical Values
Thickness (mils)		5.0~10.0 (roll)
Thickness (mils)		10.0~30.0 (roll & sheet)
Thickness tolerance		± 7% (7.0↓ mil) ± 5% (7.1↑ mil)
Width tolerance		± 1/16" (roll), ± ± 1/32" (square cut)
Color	N/A	Various



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Gloss Value (60°)	D523	135 ± 10 (highly tinted transparent) 100 ± 25 (deeply tinted transparent) 90 ± 15 (opaque)
Specific gravity	D792	1.34± 0.02 (transparent) 1.40 ± 0.04 (opaque)
Tensile Strength (psi)	D638	6000 min.
Elongation (%)	D638	100 min. (20 mil↓), 70 min. (20.1 mil↑)
Heat distortion temp. (°F @ 264 psi)	D648	152 ± 5
Vicat softening temp. (°C)	D1525	89 ± 2
Dyne level	D2578	32 min.
Impact Strength		HXX VXX EXX
Cold-break temperature	D1790	-4 °F -22 °F -31 °F

The Ultra-Drain Marker shall also be protected by a clear polyurethane resin that fulfills the following testing criteria:

- + Weathering test of two years in South Florida and show no appreciable discoloration and no change or promotion of corrosion to the surface.
- + 500 hours of exposure in a UV light and water spray apparatus and show no significant surface deterioration, increase in hardness, shrinkage, or noticeable color or gloss change
- + 7 days in a hot air circulating oven at 170°F and show no surface deterioration, shrinkage, or increase in hardness
- + 7 days in a humidity cabinet at 100°F 100% R.H. and show no color or gloss change or objectionable shrinkage
- + Resist impact and abrasion in temperatures as low as -20°F and recover from forced indentations

Special Properties

IMPORTANT NOTICE: UltraTech International trusts that the user of the product has the most accurate knowledge of how the product might be most efficiently or safely utilized in any given application or environment.

UltraTech International also trusts that the above technical data and product information is based on thorough and accurate testing of the product, but are not liable for any loss or damage to the product (or any other product, employee, or building from which the product might come into direct or indirect contact) resulting from an intentional or unintentional mishandling of the product.