

VANGUARD ADA Systems

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Snohomish, WA 98296
(360) 668 5700

The World's *most durable Detectable Warning!*

Detectable Warning (Truncated Dome) SPECIFICATIONS

Viscosity	6000 - 12000 cps, ASTM D2196 - Brookfield #7 spindle @20 rpm, 77 degF
Tracking	None after 60 minutes max., ASTM D711, 50mils wet @77 degF
VOC	25 g/l max., ASTM D2205
Hardness	Shore Durometer, A-1, 80 minimum after 24 hours
Tensile Strength	125 psi minimum at break, ASTM D638
Percent Elongation	20% minimum, ASTM D638
Water Absorption	Maximum 0.5% (ASTM D570)
Chemical Resistance	Seven day immersion test: <i>Motor oil.....no effect Transmission fluid...no effect Diesel fuel.....no effect</i> <i>Anti-freeze.....no effect Gasoline.....no effect Road salts.....no effect</i>
Adhesion	Portland cement; minimum 200 PSI. Asphalt; dependent on tensile failure of substrate
Skid Resistance	Minimum 45 (ASTM E303) in units (British pendulum)
Reflectivity	200 millicandella minimum initial reading when applied per VANGUARD specifications
Composition	Comprised of resins, reactive monomers, pigments, glass beads, and fillers. Exact composition is at the manufacturer's discretion. The material is resistant to ultra-violet light.
<u>CSI Specifications</u>	Truncated domes and all related installed surfaces to be installed according to manufacturers specifications. All detectable warning surface installations shall be at minimum, at least as non skid as the surrounding pedestrian surfaces.

SUBSTRATE REQUIREMENTS

Asphalt	Truncated dome installation on asphalt utilizes the same technique as concrete installations. The asphalt must be inspected by a VANGUARD installer prior to installation to determine if a mix or additive adjustment is required. Asphalt installations carry a 5 year warranty on labor and material (see full warranty information below).
Seal Coat	Vanguard products shall not be placed on asphalt or coal tar sealers. If surface has been sealed, grind entire area to be installed to remove all sealers.
Concrete	Minimum compressive strength 2500 PSI. Concrete must cure for minimum of 5 days in Southern states or 10 days for Northern states prior to the installation (due to wide swings in climatic environments nationwide). The Vanguard installer shall retain full discretion to determine whether it may (or should) be installed earlier or later than above defined timelines to insure proper bonding. All concrete coloring/additives shall be integral, not surface applied. All "surface curing" compounds or sealers shall be removed by method of grinding on any concrete that is less than 6 months old if deemed necessary by installer before the VANGUARD products are installed. Surface finish should be medium broom finish for maximum adhesion.
Surfaces	All surfaces to be clean and dry.
Temperatures	Surface temperatures should not exceed 88 degF, or be below 35 degF. Adjustments should be made in appropriate mixing ratios for extreme temperatures. Some regional adjustments may also be required due to climatological discrepancies.
Installation Warranty	VANGUARD Detectable Warnings are warranted to not lose more than 5% of their surface installation/adhesion, color retention or non skid characteristics over a 5 year period (occasional cleaning/pressure washing is recommended), assuming installation as per manufacturers specifications, and surface criteria. Detectable Warnings are not a driving surface, nor are they intended to be driven on. Any damage caused by "dry steering" or blade snow removal is neither implied nor covered under this warranty. Surface coloring agents or sealers (see "concrete" section above) will alter this warranty.