

e³ environmental ceramicsteel™

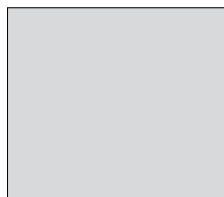
Writing Surfaces by PolyVision

The new e³ environmental ceramicsteel surface is the first and only ecologically intelligent whiteboard surface to receive Cradle to Cradle certification, and PolyVision's fourth generation of ceramicsteel writing surfaces. e³™ delivers the properties of PolyVision's best selling writing surface, P³ ceramicsteel®, and complies with Cradle to Cradle™ Silver certification criteria, which places a major emphasis on the human and ecological health impacts of a product's ingredients. For over five decades, millions of boards have been produced around the world using PolyVision ceramicsteel. PolyVision used this cross section of consumers to gather the information that helped determine what the next generation of writing surfaces should provide. Our internationally renowned R&D team worked with experts in the field of ceramics and technology to create e³ environmental ceramicsteel surface - the new industry standard for superior quality.

e³ Surface – High-Gloss and Low-Gloss* Markerboards



WHITE
High Gloss 6100H
Low Gloss 6100L



LIGHT GRAY
High Gloss 6101H
Low Gloss 6101L



BEIGE
High Gloss 6102H
Low Gloss 6102L

e³ Surface – Ultra Matte Chalkboards



GREEN
Ultra Matte 6500U



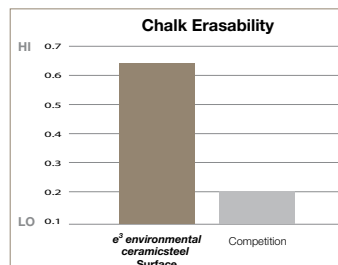
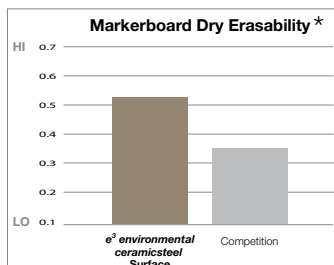
BLACK
Ultra Matte 6501U



GRAY
Ultra Matte 6502U

* There are characteristic and performance differences between High-Gloss and Low-Gloss. For further detail, refer to the chart on the backside of this card under Low-Gloss Markerboards. For additional questions, specifications, and sample color chips, please call 1.800.620.POLY.

Actual colors may vary from the colors shown.
Please contact your sales representative for color samples.



The ultra-smooth finish enables dry markers and chalk to glide easily across the e³ environmental ceramicsteel surface with minimal friction. The surface smoothness allows more dry-erase ink and chalk to be removed, improving erasability and eliminating "ghost writing."

*All markerboard erasability tests were conducted using High-Gloss e³ environmental ceramicsteel surfaces.

Environmental Features

- Enamel fused to cold-rolled enamelling-grade steel
- In all coatings, the total amount of heavy metals cadmium, mercury, hexavalent chromium, and lead is less than 0.1%
- All coatings are free of arsenic and antimony
- No Volatile Organic Compounds (VOCs)
- Steel core is made from minimum 30% post-consumer and post-industrial waste
- e³ environmental ceramicsteel surface is 99% recyclable

PolyVision Ceramicsteel Advantage

- Ultra-smooth writing surface
- Improved erasability
- Greater color contrast
- Significantly less surface/light distortion
- Optimum eye comfort
- Enhanced visibility
- Reduced chalk pressure, greater adherence
- Increased chalk/surface contrast



Chemical Resistant



Scratch Resistant



Bacteria Resistant



Fire Resistant



Graffiti Resistant



Stain Resistant

PolyVision Corporation

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e³ environmental ceramicsteel Surface

Specifications

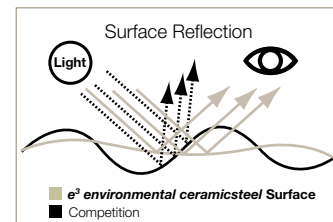
Materials

All ceramicsteel panels will be supplied with light-gauge steel. The ceramic finish is fused to the steel sheet at a temperature of approximately 1250°F for chalkboards and 1500°F for markerboards.

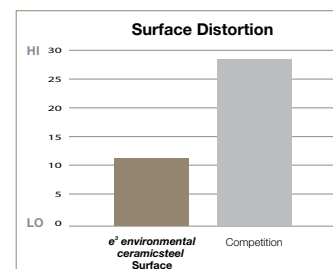
Finishes

The ceramic finish will consist of a specially formulated glass substance applied by machine. Base metal will be coiled enameled steel of an alloy suitable for the application of architectural porcelain employing a continuous coil process. Base metal will be properly pre-cleaned and treated to assure a complete bond between the steel and the subsequent ceramic coatings. Both surfaces of steel based metal will receive a ground coat of ceramic frit to be fused to the metal in a firing operation used exclusively for ground coat application to prevent contamination. A color cover coat of ceramic frit will be applied to one surface of the ground coat and fused by a firing operation used exclusively for color application. All ceramic coatings will be machine applied with automated equipment for maximum finish uniformity. Firing temperature will be approximately 1250°F for chalkboard and 1500°F for markerboard. Panels will be specified in any standard color listed on this color guide. The gloss of writing surfaces will not increase by more than three units when subjected to wearability tests specified in testing procedures for 30 hours (approximately 126,000 strokes).

Characteristic	e ³ environmental ceramicsteel Markerboard	e ³ environmental ceramicsteel Chalkboard
Write-ability	Can be written on with any dry-erase, semi-permanent, water-soluble, permanent marker, pen, or crayon without damaging the surface.	Superior, low-gloss, matte finish readily accepts chalk providing a sharp, unbroken line with less pressure and maximum surface adherence.
Visibility	Contrast/waviness for markerboards (light and dark effects) shall be no greater than 15 when tested with BYK - Gardner Wave Scan 5+ measurement device showing visual acuity (contrast sensitivity) to the human eye at distances greater than 3 meters (10' - 0"). Resolution (visual acuity) shall be based on 3 lines per degree and be visibly maintained beyond the current standard of 3 meters.	Contrast/waviness for chalkboards (light and dark effects) shall be no less than 20 when tested with the contrast measurement test with 773-gram load on chalk. Resolution (visual acuity) shall be based on 3 lines per degree and be visibly maintained beyond the current standard of 3 meters.
Erasability	Dry-erase marker ink can be wiped off easily with a dry cloth or standard eraser. Crayon, semi-permanent, and permanent marker pen inks can be removed with a solvent based cleaner.	Erases easily with a dry cloth or standard chalk eraser, retains minimal residual chalk dust, and will not leave "ghost writing." Color change (dark/light) after chalk erasing is reduced 60% from traditional surfaces.
Cleanability (Washability)	All residues that remain after normal erasing can be removed by following the care and cleaning instructions on the www.CleanMyBoard.com website.	WET Ghost measurements on chalkboard surfaces before and after wet cleaning shall not exceed a factor of 0.49. For further care and cleaning instructions, refer to the www.CleanMyBoard.com website.
Wearability	Vitrified glass-hard ceramic surface fused to light-gauge enameling grade steel at approximately 1500°F. High resistance to impact damage, abrasion, scratching, and color fading. The e ³ environmental ceramicsteel surface registers a 6.5 on the revised Mohs hardness scale.	Vitrified glass-hard ceramic surface fused to light-gauge enameling grade steel at approximately 1250°F. High resistance to impact damage, abrasion, scratching, and color fading. The e ³ environmental ceramicsteel surface registers at a minimum of 5 on the revised Mohs hardness scale.
Magnet Capability	The e ³ environmental ceramicsteel surfaces are ideal for all magnets and magnetic impregnated materials and will not be scratched or damaged from the contact.	The e ³ environmental ceramicsteel surfaces are ideal for all magnets and magnetic impregnated materials and will not be scratched or damaged from the contact.
Flame Resistance	The e ³ surface is 100% non-combustible.	The e ³ surface is 100% non-combustible.



The e³ environmental ceramicsteel surface maximizes the performance of reflected light and reduces surface glare, resulting in improved visibility under a wide range of lighting conditions.



Surface distortion (Orange Peel) has been reduced by 44% in direct comparison with the original surface.

Product and Characteristic	Writeability	Erasability	Cleanability
e³ environmental ceramicsteel Low-Gloss Markerboard	Provides the same writing characteristics as High-Gloss.	Low-Gloss surfaces will not erase as thoroughly as High-Gloss surfaces. When this occurs, a water-dampened cloth will be required to erase the surface.	After normal erasing of Low-Gloss surfaces, solvents may be used to remove harder-to-erase dry marker inks and residue from other pens. Always clear water rinse after using any cleaning agent on the surface. Refer to www.CleanMyBoard.com for further details.

Simple. Effective. Extraordinary.
The way communication should be.



Environmental Policy: PolyVision strives for continuous improvement in all areas of environmental stewardship – responsible use of raw materials and natural resources, design processes and operation of all facilities – to protect, replenish, and restore the communities in which we live and serve.