



High-Gloss Writing Surfaces

Type H whiteboard surfaces are ultra smooth, with significantly less distortion from light reflection (i.e., waviness, orange peel) for better visibility and dry erasability. Type H has less reflection than the Type U surface. It is ideal for magnet-retaining applications and easy to maintain. You can write on Type H CeramicSteel with dry-erase, semi-permanent, water-soluble, or permanent marker and simply wipe clean. Type H CeramicSteel is available in three colors, and can be customized with logos or graphics.

Polyvision e³ CeramicSteel is the most popular writing surface worldwide for whiteboards, chalkboards, and projection surfaces. The only surface to achieve Cradle to Cradle Certified® Bronze, e³ CeramicSteel delivers writability, erasability and a lifetime of durability like no other surface.





Chemical Resistant



Scratch Resistant



Bacteria Resistant



Fire Resistant



Graffiti Resistant



Stain Resistant

Hygienic Surface

CeramicSteel is a nonporous surface that is naturally resistant to bacteria and viruses. Coils, sheets, and panels are also available in Polyvision's Hygienic CeramicSteel — a proprietary finish that incorporates an additive of silver micro particles formulated to create a self-sanitizing surface.

Sustainable

Polyvision's e³ CeramicSteel is Cradle to Cradle Certified™ Bronze, highlighting the sustainable manufacturing process of the product. CeramicSteel is also 99.9% recyclable. CeramicSteel is also certified by SCS Global Services as Indoor Advantage Gold™, meeting strict indoor air quality (IAQ) chemical emission limits for volatile organic compounds (VOCs).

Customizable

CeramicSteel can be customized to support specific sheet sizes, custom colors and digital printing. Incorporate our material into your whiteboard design for premium aesthetics and functionality.

CeramicSteel Features and Benefits

- Smooth, inert surface
- Made from inorganic materials
- Magnetic
- Colorfast, will never fade
- Resistant to bacteria, graffiti, fire, scratches, stains, and chemicals
- Easy to clean
- Releases zero VOCs



With state-of-the art manufacturing and design, Polyvision's ability to create custom shapes, sizes and surface imagery is endless.

Applications

CeramicSteel can be utilized to enhance the performance and environment of the following spaces:

- Streamlined Collaborative Surfaces for Conference Rooms & Classrooms
- Systems integration for the contract furniture industry
- Sanitary Surfaces for Patient Rooms / Clean Rooms
- Sanitizing, Durable Surfaces for High Traffic Vertical Planes
 & Countertops in Quick Service Restaurants (QSR)
- Sanitizing, Durable Surfaces for High Traffic Vertical Planes
 & Countertops in Fuel Stations & Convenience Stores
- Sanitizing, Durable Surfaces for Grocery and Pharmacy
- Sanitizing, Durable Surfaces for Vertical Planes & Partitions in Public Restrooms
- Sanitizing, Durable Surfaces for Commercial Kitchens
 & Food Grade Warehousing
- Sanitizing, Durable Vertical Planes for Hospitality, Hotel,
 & Office Lobbies
- Sanitizing, Durable Surfaces on Elevator Vestibules
- Sanitizing, Durable Vertical Planes for high foot traffic areas such as airports, stadiums, and mass transport stations



Specifications

| Property | Ref. in Doc. n° 41.822 | Specification | Whiteboard e³H | | |
|---|----------------------------------|--|---|--|--|
| Total thickness enamel top coatings | 1 | ISO 2178 / ASTM B499 | 85 - 120 μm / 3.35 - 4.72 mills | | |
| Steel thickness | 2 | | See Table 1 | | |
| Thickness back-side enamel coating | kness back-side enamel coating 3 | | Type A: 25 - 50 µm / 0.98 - 1.97 mi Type B: 35 - 50 µm / 1.38 - 1.97 mil | | |
| Total thickness | 4 | | See Table 1 | | |
| Available standard widths | 5 | | See Table 1 | | |
| Available standard colors | 6 | | See Table 2 | | |
| Weight (typical) | 7 | | 2.9 - 3.2 kg/m² | | |
| Color deviation from standard | 8 | ISO 7724 / ASTM D2244-02 | ΔE^{94} = 1.5 max. | | |
| Gloss | 9 | ISO 2813 / ASTM D523 60° ISO 2813 / ASTM D523 20° | (Indicative: 92 GU) 55 (+10/-5) GU | | |
| Mohs surface hardness | 11 | EN 15771 | Min. 5 | | |
| Scratch resistance | 12 | ISO 15695 | Min. 7 N | | |
| Pencil hardness | 13 | ASTM D-3363 | > 9H | | |
| Wear resistance | 14 | ASTM C 501 (Abrasive S 33/1 kg/1000 revs.) | Max. 0.1 g | | |
| Impact resistance | 15 | ISO 4532 (< 2 mm) | Min. 20 N | | |
| Cold acid resistance | 16 | EN 14483-1-9 / ISO 28706-1-9 | Min. A | | |
| Solvent resistance | 17 | PVNV 41.822 | No change | | |
| Fire resistance | 18 | EN 13501-1 +A1 | Incombustible - Class A1 | | |
| Color stability | 19 | ASTM C 538 | ΔE ⁹⁴ ≤ 5 | | |
| Writability of chalk | 20 | PVNV 41.810 | NA | | |
| Dry-erasability of chalk | 21 | PVNV 41.811 | NA | | |
| Wet-erasability of chalk | 22 | PVNV 41.812 | NA | | |
| Chalk consumption | 23 | PVNV 41.813 | NA | | |
| Dry-erasability of drymarkers | 24 | PVNV 41.803 | Excellent (ΔE ⁹⁴ ≤ 1.5) | | |
| Erasability of water-based markers with water | 25 | PVNV 41.822 | Excellent (ΔE ⁹⁴ ≤ 1.5) | | |
| Erasability of permanent markers with alcohol | 26 | PVNV 41.822 | Excellent (ΔE ⁹⁴ ≤ 1.5) | | |
| Durability | 27 | PVNV 41.809 | RG<30% | | |
| Erasability of an aged surface | 28 | PVNV 41.809 | Excellent (ΔE ⁹⁴ ≤ 1.5) | | |
| EN ISO 28762 | 29 | EN ISO 28762 | Fulfilled | | |
| European Enamel Authority | 30 | EEA Quality Requirements | EEA 7.17: Fulfilled | | |
| MBDC Cradle to Cradle Certified | 31 | Cradle to Cradle® Bronze | Fulfilled | | |
| PEI 1002 compliant | 32 | PEI 1002 | Fulfilled | | |
| | | | | | |

Advantages

- Super-smooth writing surface
- Optimum erasability and no ghosting
- Scratch, fire, bacteria and chemical resistant
- Minimal surface/light distortion for enhanced visibility
- Safe and clean: Cradle to Cradle® Certified Bronze, 99% recyclable, no VOCs
- Standard and premium color finishes available
- Better color contrast and colorfast will not fade

Table 1

| Available Steel Widths and Thicknesses | | | | | Regional Availability | | | |
|--|-------------------|----------------|-----------------|---|---|------|------|----------|
| Width (mm) | Width (in) | Thickness (mm) | Thickness (in) | Total Thickness o/t e³ CeramicSteel (mm) | Total Thickness o/t e ³ CeramicSteel (in) | EMEA | APAC | AMERICAS |
| 874 +2/-0 | 34.4 +0.08/-0 | 0.32 ± 0.03 | 0.0126 ± 0.001 | 0.4 - 0.51 | 0.0157 - 0.0200 | Х | Х | |
| 888 +2/-0 | 35 +0.08/-0 | 0.32 ± 0.03 | 0.0126 ± 0.001 | 0.4 - 0.51 | 0.0157 - 0.0201 | | х | |
| 974 +2/-0 | 38.3 +0.08/-0 | 0.32 ± 0.03 | 0.0126 ± 0.001 | 0.4 - 0.51 | 0.0157 - 0.0202 | х | х | |
| 999 +2/-0 | 39.3 +0.08/-0 | 0.32 ± 0.03 | 0.0126 ± 0.001 | 0.4 - 0.51 | 0.0157 - 0.0203 | х | х | |
| 1174 +2/-0 | 46.2 +0.08/-0 | 0.35 ± 0.03 | 0.0138 ± 0.001 | 0.43 - 0.54 | 0.0169 - 0.0212 | х | х | |
| 1188 +2/-0 | 46.8 +0.08/-0 | 0.35 ± 0.03 | 0.0138 ± 0.002 | 0.43 - 0.54 | 0.0169 - 0.0213 | | х | |
| 1199 +2/-0 | 47.2 +0.08/-0 | 0.35 ± 0.03 | 0.0138 ± 0.003 | 0.43 - 0.54 | 0.0169 - 0.0214 | х | х | |
| 1216 +2/-0 | 47.9 +0.08/-0 | 0.35 ± 0.03 | 0.0138 ± 0.004 | 0.43 - 0.54 | 0.0169 - 0.0215 | х | х | |
| 838.2 +3/-0 | 33 (-0 +1/8) | 0.33 ± 0.03 | 0.013 (± 0.001) | 0.43 - 0.55 | 0.017 - 0.0215 | | | х |
| 877.9 +3/-0 | 34-9/16 (-0 +1/8) | 0.33 ± 0.03 | 0.013 (± 0.001) | 0.43 - 0.55 | 0.017 - 0.0215 | | | х |
| 911.2 +3/-0 | 35-7/8 (-0 +1/8) | 0.33 ± 0.03 | 0.013 (± 0.001) | 0.43 - 0.55 | 0.017 - 0.0215 | | | х |
| 1179.5 +3/-0 | 46-7/16 (-0 +1/8) | 0.33 ± 0.03 | 0.013 (± 0.001) | 0.43 - 0.55 | 0.017 - 0.0215 | | | х |
| 1216 +3/-0 | 47-7/8 (-0 +1/8) | 0.33 ± 0.03 | 0.013 (± 0.001) | 0.43 - 0.55 | 0.017 - 0.0215 | | | х |
| 1216 +3/-0 | 47-7/8 (-0 +1/8) | 0.48 ± 0.03 | 0.019 (± 0.001) | 0.58 - 0.68 | 0.023 - 0.027 | | | Х |
| 1520.8 +3/-0 | 59-7/8 (-0 +1/8) | 0.48 ± 0.03 | 0.019 (± 0.001) | 0.58 - 0.68 | 0.0253 - 0.0293 | Х | х | х |

Table 2

| Color | Description | ISO 7724 | | | Regional Availability | | | |
|--------------|------------------------|----------|-----------------|-------|------------------------------|------|------|----------|
| | | L* | a* | b* | ΔE ⁹⁴ vs standard | EMEA | APAC | AMERICAS |
| 6500 C | Green | 36.7 | -15.7 | 4.7 | < 1.5 | х | х | X |
| 6501 C | Black | 23.7 | -15.7 | 4.7 | < 1.5 | Х | Х | х |
| 6502 C | Slate | 36.5 | 0.6 | 0.2 | < 1.5 | Х | Х | х |
| 6503 C | Blue | 34.7 | -6.0 | -26.5 | < 1.5 | х | Х | |
| 6505 C | Green | 36.7 | -15.7 | 4.7 | < 1.5 | | х | |
| 6100 L/S/H/U | White | 90.0 | -0.4 | 2.9 | < 1.5 | Х | Х | х |
| 6101 L/S/H/U | Gray | 79.1 | 0.1 | 2.9 | < 1.5 | Х | Х | х |
| 6102 L/S/H/U | Beige | 87.4 | 1.6 | 14.3 | < 1.5 | Х | Х | х |
| 6104 L/S/H/U | Pastel yellow-greenish | 79.6 | -3.4 | 15.3 | < 1.5 | | х | |
| 5650 P | White | 88.3 | -1.1 | 3.5 | < 1.5 | Х | Х | х |
| | | indic | ative values on | ly | | | | |

Specification Example

Gloss expressed in gloss units (GU) should be 55 (+10/-5) GU when measured with a 20°-gloss meter according to ISO 2813 / ASTM D523. Surface is produced using a continuous coil coating process with a steel core of 0.013" or 0.019" and enamel coating on both sides. 0.023" ± 0.004" thick, incombustible and Cradle to Cradle Certified® Bronze. Meets all requirements of (i) EN14864 / ISO 28762, (ii) chapter 7.15 of the EEA (European Enameling Authority UK, GE, AU, NL, BE), and (iii) PEI 1002.

Conclusion

The e³ CeramicSteel surface is under Polyvision's Forever Warranty to provide a lifetime of durability and superior performance, resulting in low maintenance costs and a high return on investment.



Corporate Responsibility

Polyvision believes that sustainability is an important business practice in today's global economy. In line with this belief, we strive for continuous improvement in all areas of environmental stewardship — responsible use of raw materials and natural resources, manufacturing processes and operation of all facilities — to reduce the impact of our activities on the environment. In the end, we believe we are all in this together, working to protect and cultivate the world we live in to make more sustainable choices.



Manufacturing Excellence

All Polyvision facilities are compliant with international standards and certified for Quality, Environment, Health and Safety. Our environmental goals aim to reduce and manage our global environment footprint in the areas of VOC emission, water use, waste output and CO₂ emission.

- ISO 9001 Quality Management Systems Certification
- ISO 45001 Occupational Health & Safety Management Certification





Ensuring A Sustainable Future

In addition to safe and sustainable manufacturing processes, Polyvision holds our products to the highest standards. We are third-party certified for our CeramicSteel surface by:

- Cradle to Cradle Certified releases no harmful chemicals into the environment, safeguards clean water, materials are safe for humans and the environment
- Indoor Air Quality Certified to SCS.EC10.3-2014 v4.0
- ISO 14001 Environmental Management Certification





Warranty Protection

Polyvision warrants that any CeramicSteel surface manufactured by Polyvision will retain its writing and erasing qualities and maintain its gloss variance and color consistency for the life of the building or for as long as the product is in use, whichever comes first. In addition, Polyvision warrants that any Hygienic CeramicSteel surface manufactured by Polyvision will retain its Hygienic properties for the life of the building or for as long as the product is in use, whichever comes first.

Should any failure to conform to this warranty become apparent, then, upon written notice from the customer, Polyvision, at its option, will correct such nonconformity by repair or replacement. Correction in the manner provided above shall constitute a fulfillment of all liabilities of Polyvision with respect to the quality of the CeramicSteel writing surface. The warranty is applicable only under normal usage and maintenance and does not cover defects caused by improper handling, vandalism or abuse, or arising from failure to follow Polyvision's instructions and recommendations for maintenance.

The warranty is voided if any modifications are made to the products by the customer or other trades with or without Polyvision's written consent or prior knowledge. The warranty does not include the cost of removal or reinstallation. This warranty is effective as of June 4, 2009, and supersedes the terms and conditions of all prior surface warranties issued to the customer by Polyvision.

This limited warranty is the sole remedy for product defects and no other express or implied warranty is provided, including but not limited to any implied warranties of merchantability or fitness for a particular purpose. Polyvision shall not be liable for consequential or incidental damages arising from any product defect.



For more information and orders, please contact the regional team closest to you.

Americas

info@polyvision.com | 1.678.542.3100

Europe, Middle East + Africa

EMEAsupport@polyvision.com | +32.89.32.31.30

Asia Pacific

APACsupport@polyvision.com | +852.2520.0160

Surface Matters_{TM}





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.

©2023 Polyvision Corporation. All rights reserved. Polyvision, the Polyvision logo, e³, and the e³ logo are trademarks of Polyvision Corporation. Polyvision Corporation reserves the right to make changes in product design, construction or detail, and to discontinue any product or material without notice.

Cradle to Cradle Certified $^{\otimes}$ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute. V1.2



polyvision.com 7-23-2023