Corian.

DUPONT[™] CORIAN[®] PRODUCT OVERVIEW

PRODUCT NAME DuPont[™] Corian[®] Solid Surface

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PRODUCT DESCRIPTION

Basic use

DuPont[™] Corian[®] solid surface is an advanced composite product used as an architectural and design material in a variety of residential and commercial applications. Corian[®] solid surface offers design versatility, functionality and durability. Supplied in sheets and shapes, it can be fabricated with conventional woodworking tools into virtually any design. It is the original solid surface material made only by DuPont. It is widely accepted as a material for worktops, vanity tops, tub/shower walls, kitchen sinks, vanity basins and laboratory bench tops in numerous markets including lodging, healthcare, banks, boutiques, restaurants.

Composition

DuPont[™] Corian[®] solid surface is a solid, nonporous, homogeneous surfacing material, composed of about 1/3 acrylic resin (also known as polymethyl methacrylate or PMMA), and about 2/3 natural minerals. These minerals are composed of aluminum trihydrate (ATH) derived from bauxite, an ore from which aluminum is extracted. For more information on the composition of the material, please consult the Corian[®] solid surface Material Safety Data Sheets (MSDS) available via the msds.dupont.com website or via your local supplier.

STANDARD PRODUCTS

DuPont[™] Corian[®] Sheets

Available in various standard thicknesses, easily cut to size by professional fabricators.

All colours in the standard colour palette are available in 12 x 760 x 3658 mm sheets. Selected colours are also available in various widths (930 mm and 1300 mm) and thicknesses (4, 6 and 19 mm). Please consult the Corian[®] Colour brochure for more details. Check with your supplier for the latest product offering.

DuPont[™] Corian[®] Sinks and Basins

A wide range of DuPont[™] Corian[®] sinks and basins is available in 5 solid colours for custom integration with Corian[®] sheets to create a continuous surface. This includes vanity basins in solid colours for bathrooms, and single and double sinks for kitchens, bars and small wash-up areas, hospitals and laboratories. Seamed undermounting eliminates rims that trap dirt and water, minimizing cleaning and maintenance and providing improved hygiene. Care, maintenance and installation instructions are included in the packaging. Appropriate accessory products, including installation hardware, are available and recommended for residential kitchens only.

The Colours of Corian[®] Solid Surface

A broad palette of colours allows for an almost unlimited working palette. You can choose a single colour; a neutral basis for design; or experiment with eye-catching harmonies. DuPont[™] Corian[®] solid surface can also be used as inlays, accents, or as a versatile complement to other materials like metal, wood, stone, etc.

For complete information on colours, refer to the latest Corian[®] colours leaflet or to <u>www.corian.co.uk</u>. Hues, patterns and textures are related by style and character. Dark, heavily pigmented Corian[®] colours will show scratches, dust and ordinary wear and tear more readily than lighter, textured colours. As a result, these colours are recommended for applications where surface contact is light or for use as inlays and accent colours. However, the DeepColour[™] series incorporates an innovative, proprietary technology that delivers greater depth of colour and increased durability compared to other dark Corian[®] colours.

Custom Sheets

DuPont can manufacture Corian[®] sheets in custom colours, patterns and dimensions, within manufacturing capability limits and based on a minimum order quantity.

Limitations

Although DuPont[™] Corian[®] solid surface can withstand high temperatures, it should be protected against direct heat with trivets or heat shields.

Use of 4 mm and 6 mm sheets should be restricted to vertical applications or certain furniture applications only. The choice between 12 mm and 19 mm is generally based on performance and cost considerations.

Due to the complex blending of natural minerals and man-made acrylics, slight colour variations may be found within a sheet or from sheet to sheet of same colour. Therefore, checking for colour matching is an essential element of sheet inspection before starting fabrication.

DuPont[™] Corian[®] solid surface is nonporous so spills and stains remain on the surface. However, some chemicals can stain, discolour or damage the surface of Corian® solid surface. These chemicals include strong acids (like concentrated sulphuric acid), ketones (like acetone), chlorinated solvents (like chloroform) or strong solvent combinations (like paint remover). The extent of the damage will depend on the length of contact. Except for strong solvents such as paint remover, short periods of contact will not usually cause severe damage to Corian® solid surface. Acid drain cleaners should not be used as they can damage both Corian® solid surface and any plastic plumbing beneath. Corian® solid surface is not recommended for use in photographic processing laboratories. More information can be found in $DuPont^{TM}$ Corian[®] Chemical Resistance (K-27406-EMEA). In some hospitals and laboratories where strong disinfectants come in contact with DuPont[™] Corian[®] applications, the recommendation is to use solid colours and avoid extended contact.

PERFORMANCE PROPERTIES AND CHARACTERISTICS Since its introduction in 1967, DuPont[™] Corian[®] solid surface has proven itself to be remarkably durable, versatile and easy to live with in both the home and commercial environments. Typical performance properties of DuPont[™] Corian[®] products are shown in *DuPont[™] Corian[®] Performance Properties* (K-26829-EMEA). The performance of Corian[®] sheets may vary according to the thickness of the material, its aesthetics and surface finish.

Colours and patterns run through the entire thickness of the material and cannot wear away or delaminate. Joints can be glued almost inconspicuously, making virtually unlimited surfaces possible.

Corian[®] surfaces are restorable, meaning they can be fully restored with ordinary mild abrasive cleansers and a scouring pad. Cigarette burns, for example, can be easily removed in this way. Damage caused by abuse can usually be repaired on site without having to completely replace the material.

Corian[®] solid surface is nonporous with a smooth, virtually seamless appearance. With proper cleaning, the material does not promote the growth of mold, mildew and bacteria.

Corian[®] solid surface is nontoxic and nonallergenic to humans. Corian[®] solid surface meets or exceeds emissions guidelines for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

When burned, it releases mainly carbon oxides and the smoke generated is optically light and does not contain toxic halogenated gases. Because of these properties, Corian[®] solid surface is used in public spaces and sensitive environments such as airport check-in counters, wall and work surfaces in hospitals and hotels.

DuPont[™] Corian[®] sheets can be thermoformed in wooden or metal molds at controlled temperatures in order to create various 2D and 3D design objects. Embossing effects can also be created.

The translucency of DuPont[™] Corian[®] sheet is especially striking in the lighter colours as well as in thinner sheets. As a result, many designers are using it to create lamps or lighting effects in various applications.

Inlaying DuPont[™] Corian[®] with different materials or with different colours of Corian[®] is possible and can enhance the inherent beauty of the material. Inlays and logos can also be created on Corian[®] using dye sublimation or direct printing techniques.

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FABRICATION AND INSTALLATION

DuPont trains and certifies fabricators and installers who are provided detailed information regarding proper procedures; the following is a general overview, not a comprehensive guide to proper use.

Seams

To minimize material usage and facilitate installation, a corner block of Corian[®] should be made square (butt) rather than mitred. The edges to be joined should be straight, smooth and clean. Some seams need to be reinforced (see fabrication manual for details). Joints should only be made with DuPont[™] Joint Adhesive. Cutouts should be made with a router equipped with a sharp carbide bit, with a minimum diameter of 10 mm. All corners of a cutout must be rounded to 5 mm radius and the edges smoothed, both on top and bottom, all around a cutout. "L" and "U" shaped corners need smooth, 5 mm radius inside corners. For hob cutouts, corners should be reinforced with a Corian[®] corner block. See fabrication manual for more details.

Some Corian[®] colours that feature random veins and irregular patterns require special considerations regarding the seams. Please refer to the related technical bulletin for best practices in fabrication of these colours.

Sealants and Adhesives

Corian[®] solid surface is compatible with many commercially available caulks and sealants. 100% silicone products are recommended. Vertical panels of Corian[®] may be installed over suitable substrates, including water-resistant gypsum board, marine-grade plywood and ceramic tiles. In case a support is needed, apply perimeter frame or full support direct to Corian[®] using large beads of flexible adhesive leaving a space with a minimum thickness of 1,5 mm.

For making seams in worktops, repairs and custom edges, colour-coordinated DuPont[™] Joint Adhesive should be used. When used in accordance with manufacturer's instructions, it provides a smooth and inconspicuous joint. DuPont[™] Joint Adhesive is available from DuPont or its distributors.

Clearances

The minimum expansion clearance for Corian[®] solid surface in mm is 3.9 x 10⁻⁵ mm / mm [°]C x (length of the piece of Corian[®] solid surface in mm) x (biggest temperature range expected in [°]C). Joints to be caulked should be a minimum of 1,5 mm wide to allow satisfactory sealant penetration and expansion.

Precautions

Product dimensions are nominal. If tolerances are critical, review your needs with a Corian[®] specialist.

AVAILABILITY AND COST

Availability

DuPont[™] Corian[®] sheet, shape, and accessory products are readily available through a worldwide network of Distributors and certified Fabricators/Installers. Please check <u>www.corian.com</u> for a local distributor.

Cost

Cost varies with colour, thickness, and width as well as custom fabrication and installation details. Contact your DuPont[™] Corian[®] local distributor for the names of certified Dealers, Fabricators/Installers, who can supply price information.

WARRANTY

Ten-year warranty - DuPont offers Corian[®] solid surface with two levels of warranty protection. The limited "Product" warranty is standard for all Corian[®] products and ensures that material will be free from manufacturing defects for a period of 10 years after purchase.

A higher level of protection, the 10-year limited "Installed" warranty, is available through fabricators who are members of the "Corian® Quality Network". This "Installed" warranty expands the "Product" warranty to ensure that both the fabrication and the installation of the finished product will be free from defect.

With two levels of warranty protection available, you can value engineer warranty coverage for each project. Feel free to discuss your needs with a local Corian[®] specialist.



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MAINTENANCE

Preventing Damage to Corian[®] Solid Surface

Avoid prolonged exposure to strong chemicals such as acids, bases, and organic solvents. Spills should be cleaned up promptly. Refer to *DuPont*[™] *Corian*[®] *Chemical Resistance* (K-27406-EMEA) for additional details regarding chemical exposures, clean up, and general maintenance. In case of exposure outside the specifications listed in the Class I Reagents section, the 10-year limited product warranty will be void and handled as a case of abuse. While unaffected by minor impacts, Corian[®] solid surface can be damaged by heavy impacts, especially from pointed objects. It can also be damaged by excessive heat. A local Corian[®] specialist can help you include appropriate heat management into your designs.

Repairing Corian® Solid Surface

DuPont[™] Corian[®] solid surface provides superior value by being inconspicuously repairable in most cases. Minor cuts, scratches, and stains can be removed by owners using fine sandpaper and Scotch-Brite[™] pads. Deeper cuts or impact damage such as cracks may require an authorized Corian[®] fabricator/installer to make virtually inconspicuous repairs.

TECHNICAL SERVICES

There is a Technical Support Team for Europe, Middle East and Africa. Technical assistance may be obtained through your local DuPont contact.

ADDITIONAL INFORMATION

DuPont has many bulletins which give additional information about Corian[®] solid surface and its properties. Also available are bulletins, which detail fabrication, installation, repair, and proper use of accessories. Contact your local DuPont representative for more information.

REFERENCED DOCUMENTS

DuPont[™] Corian[®] Performance Properties (K-26829-EMEA) DuPont[™] Corian[®] Chemical Resistance (K-27406-EMEA) DuPont[™] Corian[®] Fire Performance (K-28300-EMEA)

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K-27478-EMEA/UK-9/15