

CORIAN® QUARTZ QUALITY AND INSPECTION

Introduction

The information contained in this document is intended for use by approved DuPont personnel, trained personnel of DuPont Authorized Distributors, Certified Fabricators, Certified Installers, and approved Service Agents during inspections before and after fabrication, before and after installation, and for field inspections.

Overview

DuPont is fully committed to the quality of its products and services. This document is intended as a reference guide for use in identifying a product non-conformity, where one may exist, in product as received from DuPont manufacturing facilities, or other suppliers, that is not indicative of the normal quality or consistency of the Corian® Quartz product. Using the information contained herein, Corian® Quartz slabs can be inspected for quality compliance prior to fabrication and installation as required in the document K-30216 Corian® Quartz Design. Additionally, this information may be used as a resource when conducting field inspections as part of a claim or dispute resolution. While the non-conformity(s) identified may arise during manufacturing, others may be created during handling or installation of the product. The focus of this document is on identifying a non-conformity that may arise during the manufacture of Corian® Quartz slabs.

Do not work with product that will result in a defect being incorporated in the final design. DuPont will replace any Corian® Quartz not conforming to product specifications when delivered. However, DuPont will not pay for labor costs for any fabrication done on defective material.

The information contained in this document is intended for use by approved DuPont personnel, and trained personnel of DuPont Authorized Distributors. Be prepared to give the manufacturer's batch number when reporting complaints.

This bulletin is not intended for public distribution.

A. Slab Batch Identification

Corian® Quartz will have a label in one of two formats. The slab identification label will start either with C or CA. The slab ID is used for filing quality or warranty complaints (the entire ID should be reported) and for determining if slabs are from the same batch for color match.

CA-FORMAT (CAXXXXXX####)

There are two parts to the slab identification number. The first seven characters (in red) are the batch ID. The last three characters (in blue) are the slab number within the batch.

C-FORMAT (CXXXXXX####)

There are two parts to the slab identification number. The first seven characters (in red) are the batch ID. The last three characters (in blue) are the slab number within the batch.

B. Slab Grading

The slab grading system separates a slab into four equal quadrants where each quadrant is individually inspected for compliance to the procedures outlined in the document. All first-grade slabs have at least three quadrants that conform to Table D-1 (below). If a non-conformity is located in a quadrant of the slab it is identified (circled) during the slab inspection process.

Figure B-1: Quadrant Inspection



C. Color Matching:

Per our Residential warranty, since Corian® Quartz is made from natural quartz, variations in the color, size, shape and pattern of distribution of the natural stone (quartz), and the tone of the background, are inherent and unique characteristics to be expected with this product. If the natural variation is visible in an installation from a distance of 7 feet (2.12 m) or greater, with uniform lighting (no spotlights or high intensity lighting), it will be considered to be a material defect.

To maximize color matching of slabs being seamed together, it is highly recommended that slabs within the same production lot, or batch, are used. The closer the slab numbers the better. It is also highly recommended that color matching of slabs is visually verified prior to the beginning of the job.

D. Color Categories:

Corian® Quartz colors are characterized based on the general appearance of the color:

- Monochromatic - are predominately single-color products in a uniform fine grain quartz matrix.

- Polychromatic - are multiple color products in a mixed large grain quartz matrix.
- Complex – are several aesthetics that may have directional or non-directional veining and/or variable pattern effect colors. The amount of the movement, veining effect and/or pattern effect is variable from color to color, slab to slab and within a slab. The movement, veining effect and/or variable pattern effect is considered normal and within specification for these colors.

Similar blemishes have different levels of acceptability based on visibility. Therefore, the non-conformity size and frequency determination is based on these three color categories.

Figure D-1: Monochromatic

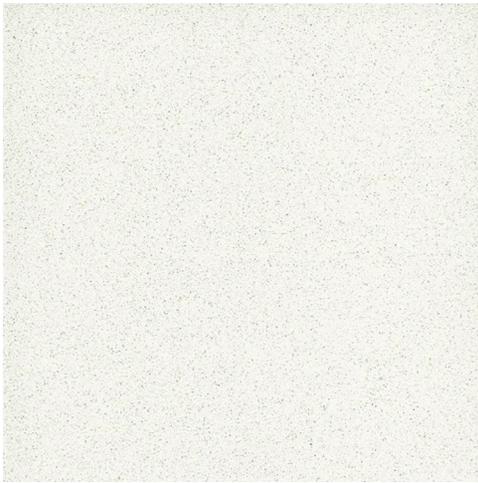


Figure D-2: Polychromatic



Figure D-3: Complex - non-directional veining effect



Figure D-4: Complex - Pattern effect and non-directional veining



Figure D-5: Complex - directional veining



BOOK-END MATCHING:

Some of the Complex colors with large, directional veining are offered in book matching (see latest price book for aesthetics that are book matched).

To assure book matching:

- Batch numbers for the two slabs need to be sequential
- There is a red stamped R or L for right / left slab (note there is no separate D-code for a “left” vs “right”).

Figure D-6: Examples of book match aesthetics



DEFINITION OF TERMS (FROM TABLE D-1):

Blotch: A blotch is an area lacking quartz crystals or having excess pigment pools. Blotches are classified as monochromatic and polychromatic. A monochromatic blotch occurs in monochromatic colors (the slab matrix contains fine quartz particles) and a polychromatic blotch occurs in polychromatic colors (the slab matrix contains a mixture of quartz particle sizes).

Contaminant: A contaminant can be a contrasting stone not belonging to the product, a pigment drip, metal, wood, etc. of significantly different appearance compared to the colors in the basic slab pattern. A contaminant is not part of the standard color formula.

Backside Ridge: A visible ridge resulting from the calibration of the backside of the slab.

Scratch: A scratch is caused by unusual abrasion on the surface of the slab, usually resulting in a white line of physical width and depth.

Void: A void is a small area of inadequate pigment/resin saturation around a quartz particle. A void will generally exhibit discoloration and surface roughness.

Surface Crack: A surface crack is a line of inadequate resin saturation around the quartz particles. Surface cracks generally exhibit discoloration and roughness, but do not extend through the slab.

Backside Roughness: Backside roughness includes valleys, pits, and other similar voids.

Pitting: A pit is defined as very small pinhole on the surface that visually extends into the material.

Fissure: A fissure is a crack that appears as a jagged line that can usually be seen on both sides of the slab. A fissure will usually originate at the edge of the slab. A fissure is not acceptable if there is concern about a section of the slab breaking.

Gloss: Gloss is the measure of light reflectivity or shine (at a 60-degree angle). The average gloss level is defined as the average of five gloss readings taken at five equal distances across the slab.

Thickness: A slab is produced within a nominal thickness (gauge) limit.

Warp: The amount of curvature (concave or convex) over a distance in linear feet.

Slab Size: Overall usable slab dimensions.

TABLE D-1: CORIAN® QUARTZ FIELD SPECIFICATION

Corian® Quartz Field Specification		
Blemish	Color category	Field Spec
Blotch	Monochromatic	Max 10 mm (0.4 in.)
	Polychromatic	Max 24 mm (1.0 in.)
	Complex	Variable
Contaminant	All	Low Contrast Max 6 mm (0.24 in.)
		High Contrast Max 4 mm (0.16 in.)
Backside Ridge	All	Max 2.0 mm (0.1 in.) depth
Scratch	All	Max 50 mm (2.0 in.)
Topside - Void, Hole, Surface Crack, Missing Material, Pitting (pinhole)	All	1 mm (0.05 in.) - 2 mm (0.08 in.) Allow up to 10 per slab
Backside - Void, Hole, Surface Crack, Missing Material	All	Max 5 mm (0.2 in.) Allow up to 10 per slab
Fissure	All	See Descriptive Text All = Unacceptable
Gloss	All	> 40 units (avg. of 5 readings)
Thickness 2 cm	All	18,5 – 20,5 mm Acceptable
Thickness 3 cm	All	28,5 – 30,5 mm Acceptable
Warp	All	< 3 mm over 3048 mm Acceptable
Slab size	All	1600 mm x 3048 mm (63 in. x 120 in.) 1600 mm x 3200 mm (63 in. x 126 in.) 1651 mm x 3302 mm (65 in. x 130 in.)

EXAMPLES OF DEFECT TYPES (FROM TABLE D-1)

Figure D-7: Monochromatic Blotch



Figure D-10: Fissure



Figure D-8: Polychromatic blotch

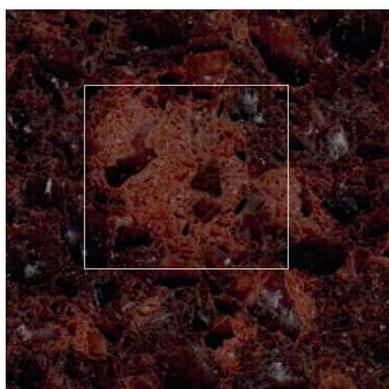


Figure D-11: Surface crack



Figure D-9: Contamination



E. Referenced Documents

K-30216 *Corian® Quartz Design*

CORIAN® QUARTZ QUALITY AND INSPECTION

PLEASE VISIT OUR WEB SITE: WWW.CORIANQUARTZ.COM OR CONTACT YOUR CORIAN® REPRESENTATIVE FOR MORE INFORMATION ABOUT CORIAN® QUARTZ.

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