

## **TECHNICAL BULLETIN 1.1**

### **DOCUMENT PURPOSE**

EOS Surfaces is fully committed to the quality of its products. This document will identify the difference between defective and usable material. This document can be used by manufactures, fabricators, and installers to inspect slabs prior to fabrication. In addition this document will be used as a resource for field inspections as a part of any warranty claim or dispute resolution.

### **PRODUCT DESCRIPTION**

EOS Solid Surface is an acrylic/polyester blended solid surface material sold to material converters/fabricators for use in the construction of but not limited to countertops.

### **SLAB SIZES AND USABLE AREA EXPECTATIONS**

EOS Solid Surfaces are currently available in the following sizes;

**3 CM Slabs** -30"x 121" (Stock Material)

**2 CM Slabs** -30"x 121" (Call for Availability)

**Custom sizes and thicknesses are available special order, contact your regional sales manager for details.**

Though EOS Surfaces produces slabs to be 100% usable there are some unforeseen and uncontrollable events that can occur during the loading, shipping and offloading process. EOS 3 cm slabs can exceed 280lbs each, special care must be used during the offloading process to prevent the slabs from colliding with nearby pallets or other objects that may cause chipping and breakage of the slabs.

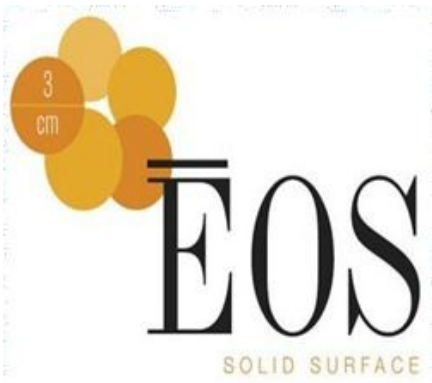
The following are guidelines used to determine the difference between acceptable material damage and material that would require attention from EOS management. ***The following described damage must be documented and photographed before fabricator personnel off load the sheets. If it is obvious that damage occurred during shipping please file appropriate paper work with truck driver and forward to EOS Surfaces for processing.***

#### **Chips**

Chips from the outer, factory saw-cut, edge should not exceed 1 inch into the width of the sheet. Chips from the outer, factory saw-cut, edge should not exceed 1.75 inches into the length of the sheet.

#### **Cracked/broken sheets**

Sheets that are broken thru the width of the sheet will be credited based on the remaining usable area of the sheet. Digital photos must be submitted for credit.



## TECHNICAL BULLETIN 1.1

### Thickness

EOS slabs are classified as a nominal thickness of 2.0cm or 3.0cm. EOS slabs do have a tolerance range for each thickness classification as follows:

#### **Nominal Thickness Tolerance**

2.0cm =19.5-20.5mm

3.0cm =29.5-30.5mm

### Sheet Contamination/Foreign Material

Materials found in EOS slabs that are determined to be **not** an acrylic/polyester solid surface such as; *Metal, rubber, wood, etc.* are considered foreign material. If the foreign material cannot be safely removed and repaired during fabrication it must be photographed and reported immediately to EOS Surfaces management.

### Off colored particulate contamination

Off colored particulate found in the sheet i.e.; black particulate in white EOS should be drilled and filled with corresponding adhesive color during fabrication. Off colored particulate that is determined to be *un-repairable* should be photographed and reported to EOS management immediately. Off colored particulate exceeding the proximity standard of five pieces per five linear Ft. should be reported to EOS management immediately.

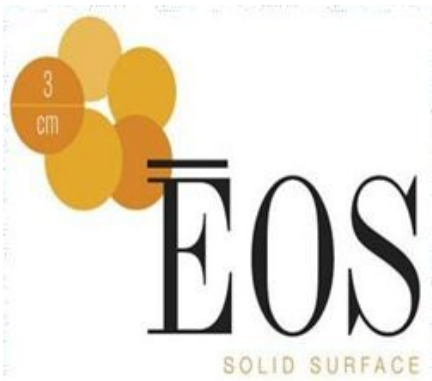
### Slab Warp

Though we take every precaution to avoid slab warp, warping can occur during shipping and if slabs are stored improperly. Slab warp must be reported immediately after it is found during delivery inspection. The following chart outlines the limits of slab warp.

Colors	Type of Defect	Specification Limits
All Colors	Warp of slab makes it impossible to lay flat	>1/8 inch over 30 inch length

***Warping caused by improper storage of material in fabricator facility is not covered by EOS Surfaces.***

**NOTE:** *Because of the fact that EOS is a solid surface material most minor warp can be removed by placing the slabs on a flat surface in a warm area, the slabs should go back to tolerance level that can be easily fabricated and installed.*



## **TECHNICAL BULLETIN 1.1**

### **Factory Finish**

The EOS manufacturing facility uses state of the art machinery to create a consistent finish on the slabs. The finish delivered to the fabricator is a “factory finish” it is not a final finish. The fabricator is required to use standard solid surface finishing steps to create the desired final finish for their end customer.

The use of vacuum lifters are recommended to minimize dragging of sheets over one another. The machinery used by EOS manufacturing can sometimes cause a swirling finish effect, this is merely a bi-product of the finishing process and is easily removed by using standard solid surface finishing techniques.

### **EOS RECOMMENDED FINISHING PROCESS:**

EOS fabricators have reported great success with Abralon Sanding pads when finishing EOS solid surface. The Abralon pads start at 360 and go all the way through 2000 grit. With most colors, the 360 pad is enough to achieve a nice matte finish on light and neutral colors. For darker colors it is recommended to go to the 1000 or 2000 pad for a higher gloss. These pads work best with a large sander such as the Surcare Sander and a vacuum hook-up, but are also quite effective just on a six-inch sander. The Abralon sanding system works very quickly with excellent results. We highly encourage our fabricators to consider them for finishing EOS products. For information on where to purchase either the Abralon Pads or a Surcare sander contact Gordon Shell – [Gordon@eos-surfaces.com](mailto:Gordon@eos-surfaces.com) .

### **EOS 3cm performance test results**

**Flame Spread Index -ASTM E-84 Class 1**

**Smoke Development Index -ASTM E-84 Class 1**

**Water Absorption -ISO 4586-2 M7  $\leq 0.4\%$**

**Thermal Expansion Co-Ef -ASTM D 696 1.9 X 10<sup>-5</sup>in/in/°F**

**Flexural Modulus Expansion -ASTM D 790 1.3 X 10<sup>6</sup> PSI**

**Thermal Shock Resistance -ANSI Z124.6 >1,500 cycles =No Defects**

**Compression Strength- ASTM C 170 195 MPa / 28,282 PSI**

**Flexural Strength -ASTM C 170 46.1MPa / 6,686 PSI**

**Abrasion Resistance- ASTM D 4060 875mg Weight Loss**

**Freeze/Thaw Cycles -ASTM C 1026 >15 Cycles =Unaffected**

**Tensile (breaking) Strength ASTM D 638 19.1 MPa / 2,770 PSI**