## Fabrication Bulletin # 2010

## **Slab Preparation**

HanStone<sup>®</sup> Ouartz

HanStone Quartz offers the natural beauty of quartz with up to six times the strength and durability of granite. More than 90% of HanStone Quartz is mined quartz crystals, one of nature's hardest minerals. The quartz is combined with resins and pigment to create the look of natural stone without the high maintenance. There is no need for sealing, conditioning, and polishing. HanStone Quartz is scratch and stain resistant and its non-porous nature makes it an ideal surface for residential or commercial applications.

The cutting of quartz slabs should be done with equipment and tooling specific to the natural stone industry. Bridge saws with segmented diamond blades, CNC mills with diamond tooling, and waterjets using garnet abrasives are the current state-of-the-art in cutting quartz slabs. HanStone slabs should never be stored where exposed to ultraviolet light, however we do realized that often slabs can be covered and stored in unheated storage areas. Prior to sawing a HanStone slab make sure the material is properly acclimated to the temperature in the fabrication shop. This will help to minimize any cracks due to sawing cold or frozen slabs.

Please note that there are a large number of variables in the fabrication process that can affect the final outcome and potentially result in damage to the material. Also refer to Fabrication Bulletin 2002 – Sawing Best Practices, for additional information.

## <u>Do's & Don'ts</u>

- Carefully handle slabs using OSHA approved lifting devices
- Acclimate the slabs to temperature of the fabrication shop for at least 24 hours. Do not cut slabs that are frozen.
- Do not heat slabs using any type of torch or open flame.
- Do not move slabs on the saw bed using pry bars, pinch bars, or wrecking bars.
- Remove the peel-coat and inspect the slab for defects prior to any cutting. Do not cut slabs with the peel coat on.
- Clean the slab if necessary to remove any residue.
- Use the correct type of diamond blade / abrasive / finger bit for cutting quartz

## **Slab Preparation and Sawing Checklist**

 There are many variables in the fabrication process; slab handling methods, condition of equipment, level cutting bed or table, type of saw blade, cutting feed rate, water pressure, spindle speed, condition of tooling, volume and placement of coolant, and variable geometry of



cutting, just to name a few. If HanStone material is breaking during the fabrication process, all of these variables should be looked at and/or adjusted prior to assuming that the slab is defective.

- 2. Acclimate slabs to the temperature of the fabrication shop for a minimum of 24 hours prior to cutting.
- 3. Always inspect slab material for defects prior to cutting.
- 4. In general, HanStone Quartz Surface should be cut at a slower speed or feed rate than granite.
- 5. Whenever possible, cut from the outside of the slab toward the center. Avoid plunge cutting.
- 6. Supply an adequate volume of water at the cutting interface. The amount of water used should be increased from the amount used in cutting granite or marble. If you see sparks at the saw blade / stone interface, you are not using enough water.
- 7. Use the correct equipment, blades, and tooling for cutting Quartz Surfacing.
- 8. Always comply with the equipment manufacturer's recommendations and/or tooling vendor's advice.

