Alpha Professional Tools

R&D Evaluation Request / Report

DATE: February 29, 2008	**REQUESTED BY: Nao Takahashi**
TECHNICIAN: John Beuselinck	**REPORT NAME: Applied Coatings / Color Mirage Glass**
PRODUCT ID:	
VENDOR:	

OBJECTIVE

Evaluate cutting performance of Alpha® VETRO glass cutting blade on Color Mirage Glass.

METHOD OF EVALUATION

- Color Mirage Glass
  - 3.44mm to 3.77mm thick

- Alpha® VETRO Glass Cutting Blade / 10”

- Dewalt Tile Saw, Model D24000, 4200 rpm

RESULTS

- Color Mirage glass tiles were successfully cut using the Alpha® VETRO blade.

- Glass tile was placed on Styrofoam to support the glass tile during the cutting application. I feel this stryofoam helps support the glass tile to minimize the chipping.

- Adjusted cutting depth so the Alpha® VETRO blade would only cut 1/8” into the Styrofoam material.

- We recommend that you place the coating material face up when cutting; tile saws have downward cutting action and cutting with the coating material face up will eliminate chipping or tearing of the coating material.

- Score & Snap method not performed since glass tiles are not flat.

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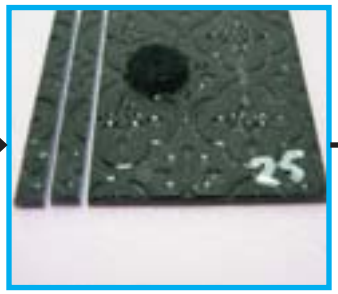
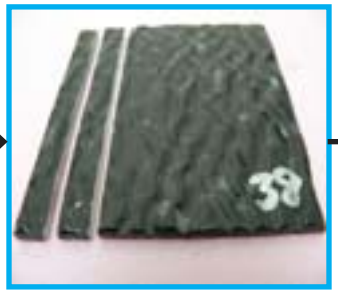
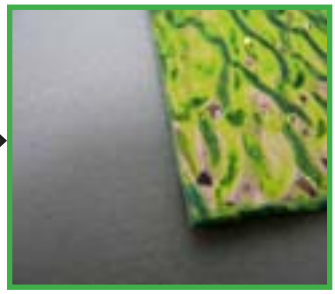
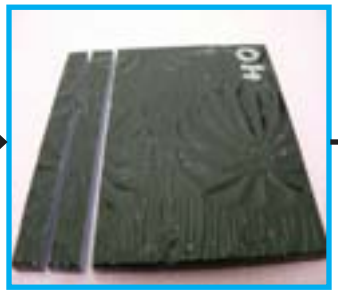
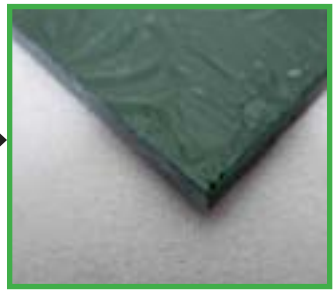
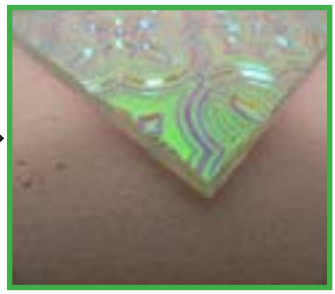
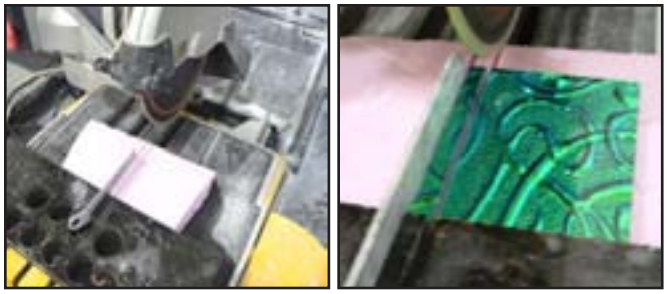
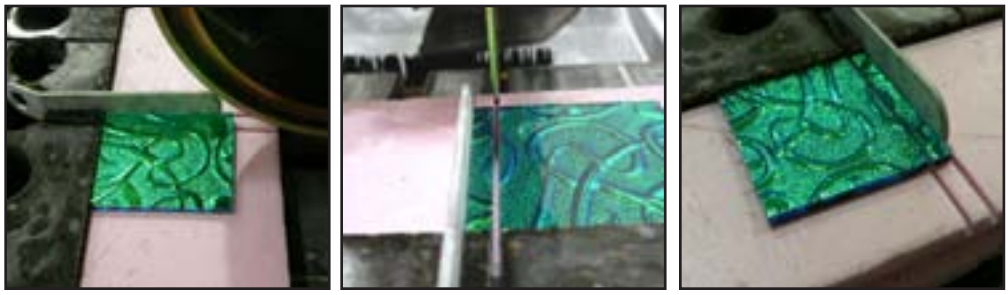
Cutting Results

Glass Color	Glass Mold Pattern	Cut edge on back of glass	Cut edge on top of glass tile
			
			
			
			
			

Styrofoam used for cushion & support on sliding cutting table.



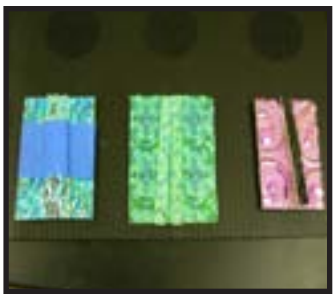


CONCLUSION

Alpha® VETRO wet cutting blade series will successfully cut the Color Mirage Glass Tiles with minimum chipping on the cut edge. If the glass tiles have a coating material, we recommend that you place the coating material face up when cutting; tile saws have downward cutting action and cutting with the coating material face up will eliminate chipping or tearing of the coating material.

Next Step

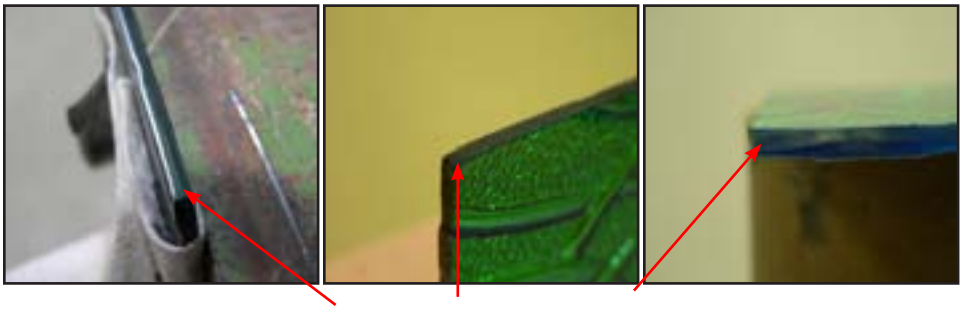
- Ship Color Mirage tiles back to Applied Coatings for their review.
- Shipped 3/7/08, UPS Ground Tracking #: 1Z0667970345242629
- Don Ferko (Alpha® Sales Representative) is scheduled to meet with Applied Coatings to review cut samples and submitted report.
- Meeting scheduled for March 11, 2008.



Samples shipped back to Applied Coatings for review.
Three glass tiles & strips cut from different mold patterns.

Alpha® PVA to polish edge of Glass

Cut edge of glass tile after Alpha® Vetro blade.

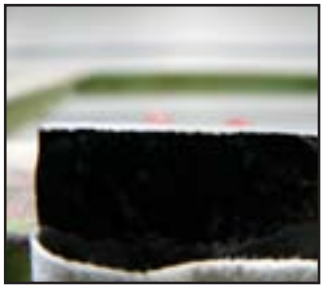


Edge polished by:
Alpha® PVA
Red & Green

PVA Green & Red

PVA Green

Alpha® VETRO blade



Coated material after glass tile cut with Alpha® Vetro blade.

Coated material after glass polished by: PVA Red & Green

Edge of glass gently eased by PVA Green; PVA did not remove coated materal from glass.

CONCLUSION

Alpha® PVA Red & Green successfully polished the edge of the glass tile and also eased the edge of the tile on both sides; coated material & non-coated material. To ease the edge, the operator gently touched the edge of glass using the PVA Green wheel. (See photos above)

Tool used: Metabo Variable Speed Grinder / Model: WE 9 - 125 Quick
RPM Setting: #4 setting on dial.