



# TECHNICAL DATA

## 3M™ TRIZACT™ DIAMOND TILE

DN Series

A structured, fixed abrasive composite pad consisting of an inorganic abrasive (vitreous diamond agglomerates) in an organic binder (cross-linked polymer) capable of lapping a multitude of substrates on varied equipment and processes.

### APPLICATION

Reference the following Technical Application Bulletins for detailed information on use of Trizact™ Diamond Tile 677XA:

- Machine Prep and Pad Mounting Instructions
- Lubricant Use and Filtering Instructions
- Pad Conditioning Instructions
- Frequently Asked Question

### BENEFITS

- Eliminates messy slurries
- Produces superior surface finish to slurry
- Reduces overall process time
- Reduces waste disposal costs
- Eliminates lap plate replacement
- Fits on any lapping machine

### PHYSICAL CHARACTERISTICS

AVERAGE MATERIAL REMOVAL & FINISH					
Grade	Borofloat™ Glass	Pyrex® Glass	BK7 Glass	Fused Quartz	Window Glass
3 Micron	58 µm/min Ra = 1575 Å Rt = 1.408 µm	55 µm/min Ra = 1625 Å Rt = 1.545 µm	22 µm/min Ra = 1629 Å Rt = 1.455 µm	58 µm/min Ra = 657 Å Rt = 0.6437 µm	N/A
6 Micron	105 µm/min Ra = 2352 Å Rt = 2.169 µm	115 µm/min Ra = 2495 Å Rt = 2.316 µm	76 µm/min Ra = 2531 Å Rt = 2.284 µm	69 µm/min Ra = 951 Å Rt = 0.9865 µm	43 µm/min** Ra = 2814 Å Rt = 2.503 µm
9 Micron	181 µm/min Ra = 3035 Å Rt = 2.580 µm	165 µm/min Ra = 3152 Å Rt = 2.827 µm	105 µm/min Ra = 3842 Å Rt = 3.429 µm	89 µm/min Ra = 1336 Å Rt = 1.0792 µm	72 µm/min** Ra = 3499 Å Rt = 3.061 µm

Double-sided lapping on Peter Wolters AC 500 machine.

2 psi, 96 rpm, 200 ml/min flow rate, 5% Sabrelube® 9016 in water. 5 minute cycles, ten 65mm diameter substrates

\* Data is an average of four 1.1mm scans with a 0.25µm tip radius and 250 µm cut off

\*\* 10% Sabrelube® 9016 in water

### AVAILABILITY

Available in 3, 6 & 9 micron grades including PSA backing

Manufactured to any shape with any hole size & hole configuration

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