



3M™ Trizact™ Diamond HX Discs

FREQUENTLY ASKED QUESTIONS

Q: When do I use 3M™ Trizact™ Diamond HX Discs Gold?

A: 3M™ Trizact™ Diamond HX Discs Gold should be used when there is apparent wear or visible damage on the floor. Such damage might be caused by pitting from action of ice-melting agents or other chemicals. Scratches can occur by abrasion from movement of pallets or other heavy items, heavy foot traffic, or any other physical wear of the floor surface.

Q: How many passes should be made with 3M™ Trizact™ Diamond HX Discs Gold?

A: Depending upon the condition of the floor, 3–8 passes are recommended. When the floor is smooth to the touch and wear marks are removed, or the visual appearance is acceptable, you can switch to 3M™ Trizact™ Diamond HX Discs Red. Typically, the number of passes with the 3M™ Trizact™ Diamond HX Discs Red can be reduced to 2–4 after using 3M™ Trizact™ Diamond HX Discs Gold. The recommended number of passes with 3M™ Trizact™ Diamond HX Discs Blue remains the same, at 6 passes. With more experience using the 3M™ Trizact™ Diamond HX Disc system, the number of passes may be adjusted for the condition of the floor and desired aesthetic appearance.

Q: How are 3M™ Trizact™ Diamond HX Discs different from traditional diamonds used in floor grinding and polish?

A: 3M™ Trizact™ Diamond HX Discs are precisely-patterned, carefully engineered structured composite abrasives. The composite abrasive features are distributed uniformly on a cushioned, flexible backing. As the composite structures wear with use, new diamonds are continuously exposed, resulting in uniform, exceptionally consistent and fast cutting action through the life of the abrasive product. Due to the unique design characteristics of the proprietary 3M™ Trizact™ Diamond HX Discs, fewer steps are required when compared to traditional floor grinding and polishing abrasives.

Q: Can I use 3M™ Trizact™ Diamond HX Discs dry?

A: 3M™ Trizact™ Diamond HX Discs work when used dry, but it is not recommended due to the possible generation of excessive heat and dust. Water or a neutral cleaner should always be used with 3M™ Trizact™ Diamond HX Discs.

Q: Should I use 3M™ Trizact™ Diamond HX Discs to strip the floor with or without floor stripper chemicals?

A: The use of traditional 3M stripping chemicals and 3M floor pad procedures is recommended.

Q: Will 3M™ Trizact™ Diamond HX Discs work to remove Scotchgard™ Ultra Durable Floor Finish or other ultra durables, urethanes or epoxies?

A: Urethane types of coating residue can adhere to and clog 3M™ Trizact™ Diamond HX Disc abrasive features. Use of Scotchgard™ Ultra Durable Floor Finish Remover is recommended.

Q: On what types of surfaces can I use 3M™ Trizact™ Diamond HX Discs?

A: Every floor requires careful consideration of specific material type, floor condition and available equipment. Successful results have been obtained on hard surfaces such as terrazzo, concrete and marble. Use on combinations of different types of stone materials (e.g. marble with decorative granite inlay) should be approached very carefully or avoided altogether.

FREQUENTLY ASKED QUESTIONS (cont.)

Q: What if I start seeing scratches while using 3M™ Trizact™ Diamond HX Discs?

A: Scratching can occur from damage to the 3M™ Trizact™ Diamond HX Discs resulting from floor conditions such as tile lippage and exposed edges from expansion joints and seams. If visible scratches appear, examine the 3M™ Trizact™ Diamond HX Discs for missing abrasive features, creasing, or other physical damage, and rework the floor as necessary. “Crop-marking” or “donut mark” swirls should be avoided by maintaining constant machine movement — don’t pause the machine in one spot with the driver pad rotating.

Q: Do I have to use 3M™ Trizact™ Diamond HX Discs in sequence starting with 3M™ Trizact™ Diamond HX Discs Gold and finishing with 3M™ Trizact™ Diamond HX Discs Red and Blue?

A: 3M™ Trizact™ Diamond HX Discs should ALWAYS be used in the order: Gold → Red → Blue. Follow final polishing by burnishing with Scotch-Brite™ Purple Diamond Floor Pad Plus and Scotchgard™ Stone Floor Protector. Depending on the floor condition, use of 3M™ Trizact™ Diamond HX Discs Gold as the first step is optional to quickly remove surface scratches and other damage before going on to the normal Red → Blue → Purple sequence.

Q: Scotch-Brite™ Sienna Diamond Floor Pad Plus and Scotch-Brite™ Purple Diamond Floor Pad Plus pads produce slight milky slurry during use. Does the slurry from 3M™ Trizact™ Diamond HX Discs look similar?

A: The slurry produced with 3M™ Trizact™ Diamond HX Discs looks similar, but the volume is typically much greater. Keeping the slurry on the floor during use of 3M™ Trizact™ Diamond HX Discs is critical — follow the procedures detailed in the 3M™ Trizact™ Diamond HX Discs Technical Data Bulletin.

Q: Can the hook mounting disc be reused?

A: Yes, the hook mounting disc can be reused until it becomes loaded up with pad fiber or debris. After many use cycles, the hook mounting discs will eventually weaken and will not adhere well to the driver pad.

Q: Do 3M™ Trizact™ Diamond HX Discs require any break-in before use?

A: Usually, new discs become “conditioned” or “worn-in” during the first pass on the recommended multi-pass sequence. Break-in can be sped up by rubbing 3M™ Trizact™ Diamond HX Discs by hand on a rough surface (e.g. a concrete wall or floor) to remove the thin skin of resin on the top of the as-produced discs. It’s helpful to mark lines on the abrasive surface with a permanent-ink felt pen. When the lines wear away from either pre-conditioning or during initial machine passes, the 3M™ Trizact™ Diamond HX Discs are fully worn in.

Q: When do I use 3-inch vs. 5-inch 3M™ Trizact™ Diamond HX Discs?

A: Driver pads 16 inches and smaller use 3-inch discs. Driver pads 17 inches or larger use 5-inch discs.

Q: When using 3M™ Trizact™ Diamond HX Discs, electric floor machines sometimes overload and trip circuit breakers. Why is this?

A: The efficient cutting action of 3M™ Trizact™ Diamond HX Discs creates high friction in some cases, especially if the floor is not kept adequately wet, and especially when using 3M™ Trizact™ Diamond HX Discs Blue. If this occurs, a few drops of dish washing soap (Dawn® or equivalent) can reduce the surface tension at the disc/floor interface and help the machine to run more smoothly. In extreme cases, lessening the load on the discs can help. First remove any weight on the machine and then try adding one or two additional discs on the driver pad. This distributes the machine weight over more area and reduces the downward force on each disc.

Q: How do I repair scratches?

A: Replace damaged discs and rework as necessary.

Q: How do 3M™ Trizact™ Diamond HX Discs work compared to Scotch-Brite™ Diamond Floor Pads?

A: Compared to Scotch-Brite™ Diamond Floor Pads, 3M™ Trizact™ Diamond HX Discs abrade the floor, creating a smooth, flat, uniform surface for finishing to ultra-high gloss with subsequent Scotch-Brite™ Purple Diamond Floor Pad Plus and Scotchgard™ Stone Floor Protector application procedures.

Q: What “grade” are 3M™ Trizact™ Diamond HX Discs?

A: 3M™ Trizact™ Diamond HX Discs are not specified by a grade designation. The abrasive actions of the 3M™ Trizact™ Diamond HX Discs are classified as follows:

3M™ Trizact™ Diamond HX Discs	Abrasive Action
3M™ Trizact™ Diamond HX Discs Gold	Coarse
3M™ Trizact™ Diamond HX Discs Red	Medium
3M™ Trizact™ Diamond HX Discs Blue	Fine

Due to the proprietary design characteristics of 3M™ Trizact™ Abrasives, fewer abrasive steps are required when compared to traditional floor grinding and polishing abrasives. Each of the 3M™ Trizact™ Diamond HX Discs will typically replace several grades of conventional diamond abrasives.

Conventional Diamond Abrasives	3M™ Trizact™ Diamond HX Discs
ANSI 60, 80, 100 grit	3M™ Trizact™ Diamond HX Discs Gold
ANSI 100, 120, 180, 220, 240, 320, 400 grit	3M™ Trizact™ Diamond HX Discs Red
ANSI 400, 600, 1000, 1200 grit	3M™ Trizact™ Diamond HX Discs Blue

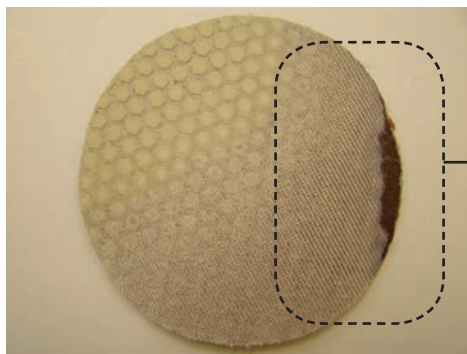
Q: How long will 3M™ Trizact™ Diamond HX Discs last?

A: 3M™ Trizact™ Diamond HX Disc life depends critically on use factors such as flooring type and condition, machine pressure and speed.

- Terrazzo: estimate 5,000 FINISHED ft² (5,000 ft x 6 passes = 30,000 ft² TOTAL)
- Concrete: due to variability in starting surface condition, estimate ~1,000 ft² finished (1,000 ft x 6 passes = 6,000 ft² TOTAL)

Q: How will I know when to replace 3M™ Trizact™ Diamond HX Discs?

A: 3M™ Trizact™ Diamond HX Discs will continue to cut as long as the abrasive features are visible. The cloth backing may be exposed on parts of the disc as the abrasive wears down (See Photo 1). If the discs wear unevenly as in the photo, they can be removed and rotated on the driver pad to use up the remaining composite abrasive layer. Of course, as the abrasive wears away across the disc, cut performance will decrease.



Backing is exposed as the abrasive grain wears down.

Photo 1

Q: How much pad pressure should the customer use?

A: 3M™ Trizact™ Diamond HX Discs Red are normally used at higher machine pressure settings. The efficient cutting action of 3M™ Trizact™ Diamond HX Discs Blue causes more friction and can overload some machines at higher pressures. If this occurs, lower pressure settings should be selected — lower pressure also helps to extend disc life.

Q: Will this process work on both cement-based terrazzo and synthetic/epoxy terrazzo?

A: Yes, 3M™ Trizact™ Diamond HX Discs can be used with all types of terrazzo surfaces.

FREQUENTLY ASKED QUESTIONS (cont.)

Q: Will using 3M™ Trizact™ Diamond HX Discs impact the life (thickness) of the stone flooring?

A: Although 3M™ Trizact™ Diamond HX Discs abrade the floor surface — removing scratches and other shallow surface damage — the effect on the overall thickness of the floor is not significant.

Q: What about other types of stone floors like granite, ceramic, porcelain and sandstone?

A: 3M™ Trizact™ Diamond HX Discs can abrade all hard floor materials, though restoring a high gloss appearance can be difficult or impossible, even using the Scotch-Brite™ Purple Diamond Floor Pad Plus and Scotchgard™ Stone Floor Protector. Extreme caution should be exercised to avoid damaging these types of floors surfaces.

Q: What types of equipment can be used with 3M™ Trizact™ Diamond HX Discs?

A: Low-speed swing machines and walk-behind or riding auto-scrubbers are suitable. These machines should always be operated at a slow pace across the floor surface. 3M™ Trizact™ Diamond HX Discs should NOT be used on high-speed burnishers (>1,000 rpm).

Q: How are floor edges and stairs finished?

A: For detailing around edges and obstacles, such as electrical floor outlets, column bases, etc., a swing machine is recommended. On stairways and other small, confined areas, a small electric rotary hand tool works well, using a water spray bottle to keep the work area damp. Extreme caution should be exercised when using water around any electrical tool — use of double-insulated tools and/or GFCI plugs and cords is required. Tool rotation speed should not exceed 4,000 rpm. A 3M™ Electric Variable Speed Polisher (PN28391) and a 900-series disc pad holder is recommended.

Warning

Given the variety of factors uniquely within user's knowledge and control that can affect the use and performance of a 3M™ Floor Pad, user is ultimately responsible for determining whether the floor pad is suitable for user's flooring and method of application. Some floors may release material (such as dust) that could be hazardous to the user or bystanders. Eye, skin and/or respiratory personal protection equipment may be appropriate to reduce the risks associated with exposure to such airborne material.

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