



# Description

SHIMICOAT RediLock Diamond Plates are ideally engineered for fast and easy removal of dense surfaces on hardtroweled concrete floors. RediLock Diamond Plates are available over a wide range of grits, bond and segment design to ensure optimal performance on many surface preparation applications.

SHIMICOAT offers a wide range of RediLock Diamond Plates to grind many surfaces such as porous ceramic glues, soft and rain-damaged concrete, terrazzo, semi-polished concrete as well as removal of vinyl glues, paint, epoxy and other concrete surface materials. SHIMICOAT RediLock Diamond Plates are safe, instant, easy to insert and grind.

# Specifications

SHIMICOAT RediLock Diamond Plates provide maximum cutting speed and optimal wear resistance in heavy grinding applications. Working speed and tool life of your RediLock Diamond Plates can be improves significantly by choosing the right diamond shoes. Three parameters to consider when choosing your RediLock Diamond Plates:

NO	Parameter	Specification
1	Grit sizes	16, 20, 30, 60, 80, 120
2	Simplified 3 bond system Soft, Medium & Hard	
3	Segment Design	Single & Double

# Applications of Grit:

Grit size of RediLock Diamond Plates define how abrasive and coarse the shoes are. The lower the grit, the higher the concentration of Impregnated Diamond within the body of metal shoes, hence the more aggressive.

Grits	16	20	30	60	80	120
Concrete Surface	Super Hard	Hard	Medium	Soft-Clean Up	Polishing	Polishing
Diamond Concentration	Intense	High	Medium	Average	Low	Very Low



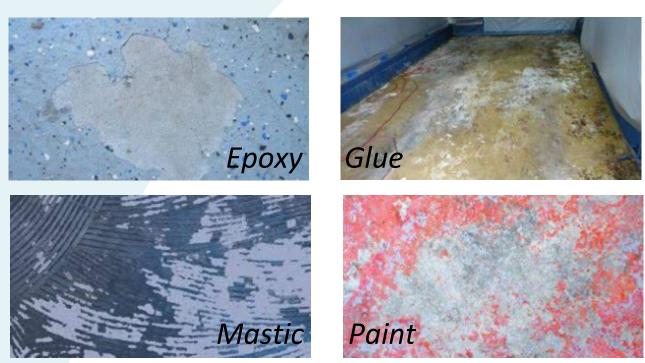




## Applications of PCDs:

PCDs or Polycrystalline Diamonds are used ONLY, if Grit Size 16 is unable to cut and remove certain surface materials. PCDs scratch the surface aggressively and once used, a surface grinding with grit sizes of 16, 20 or 30 is required to smooth off the surface.

Surface coatings materials such as epoxy resin, glue, mastic or paint can easily be removed with PCDs. In general, these materials are sticky and typical diamond plates tend to get blunt. PCD grinding discs are ideal tools to remove them. Below are the normal coating materials.



## Features of PCD Grinding Shoes

1. PCDs are designed for fast removal of paint, urethane, epoxy, adhesives and residues.

Due to special hardness of PCD grinding disc is more aggress and long lasting service, especially useful when conventional <u>diamond cup wheel</u> can not grind the material quick enough or when they get clogged up with the sticky coating.

PCD diamond particles are ultra rough and have three times the surface area of diamond.

The PCD segment scrapes and rips the coating from the surface.

Can be used wet or dry.

Re-designed with larger and stronger PCDs

Re-designed PCD shape to prevent from falling off during high speed grinding

### Metal Bond:

SHIMICOAT offers three types of metal bonds (Soft, Medium and Hard) to ensure the pads stay opened and sharp even on the hardest top layers. Selection of only three metal bond types make your selection tools very easy, allowing quick choice of toolkit for both professional and occasional use.

SHIMICOAT RediLock Diamond Plates will get to the same level of aggregates exposure in less passes, shorter time and less labour cost when compared to many others in market.

Soft bond: For very hard concrete.

Medium bond: For medium to hard concrete.

Hard bond: For medium to soft concrete.

MATERIALS CHEMICALS RESINS PAGE

EQUIPMENT



With a simplified 3 bond system covering soft to hard concrete surfaces, satisfaction guarantee.

## Segment Design:

SHIMICOAT offers RediLock Diamond Plates in two segment types, Single and Double.

Single: Less contact point, hence more aggressive and more pressure per square centimetre – Faster Grind.

Your RediLock Diamond Plates wear out quicker than double.

Double: More contact point, hence less pressure per square centimetre – Longer Grinding Time. Your

RediLock Diamond Plates last longer.

Fast Grinding	Longer Grinding Time		
SINGLE	DOUBLE		
Faster Wear	Longer Lasting		

Three options of Grit Size, Bond Type and Segment Designs ensure optimal applications for quick surface grind to intense professional use in specialist applications. SHIMICOAT Diamond Grinding Plates provide maximum cutting speed and wear resistance in heavy grinding.

#### **Features**

SHIMICOAT metal bond range is an outstanding RediLock designed to deliver incomparable high impact productivity. An excellent choice for surface preparation through to high end polishing applications where outstanding results are required.

- Incomparable production rates
- Outstanding surface materials removal capacity
- Extended tool longevity
- Performance validated with extensively field trials
- Streamlined 3 bond system to cover very soft to very hard concrete.
- Economical

# Life Expectancy / Grinding Capacity

200-300 sqm for set of 9 double Depending on concrete conditions

# **Applications**

- Surface Preparation Concrete
- Surface Materials Removal
- **MATERIALS**

CHEMICALS \_\_\_\_



**RESINS** 



**EQUIPMENT** 

Ph: (08) 9364 7446 | info@shimi.com.au | ABN: 28 622 871 283 | www.shimi.com.au



- Carpet Glue, Ceramic Glue & Epoxy Coating Removal
- Polishing Terrazzo & Natural stone
- Wet & Dry use

# Specifications

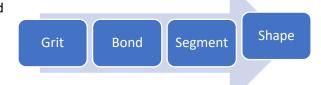
Wide Range of Grit sizes: 16, 20, 30, 60, 80, 120 and PCDs

Simplified 3 bond system: Soft, Medium & Hard Practical Segment Design: Double & Single

## Direction

## RediLock Diamond Plate Selection:

The arrow shows the Hierarchy importance of RediLock Diamond Plates selection. The most important parameter is Grit. Shape has little to no effect on grinding performance. SHIMICOAT offers the following shapes:



- 1. Round
- 2. Hexagon (known as Coffin Shape)
- 3. Arrow
- 4. Square

Grinding machines with diamond impregnated metal segments on steel discs, are used to remove the top layer of concrete and profile the surface prior to coating application.

The operator should run the grinding machine in one direction then coming back perpendicular across the first series of cuts (Criss cross Motion).

There are a large number of diamond grits and metal bond segments and it is important to choose the right selection for your effective concrete preparation. These are as follow:

Hard Metal Bond: Used on soft, chalky and porous concrete as well as broom finished and rough concrete

surface.

**Medium Metal bond:** Used for general purpose concrete

**Soft Metal Bond:** Used for hard, Steel-Troweled and/or Burnished Slabs.

Soft or Super-Soft Metal Bond can be used for extremely hard, power-Troweled and/or

sealed slabs. Ideal choice for removing acrylic sealers.

**PCDs**: Used for removal of coating materials, mastic and glue. PCDs scratch the surface, grit

grinding may be advisable afterwards to smoothen the surface.

Extra care shall be taken to ensure high points or edges are correctly removed.

We recommend dry grinding for the following reasons:

- No exposure to water, so minimizing corrosion of Diamond Plates and Machineries
- Improve the life span of the tools
- Faster progress and no time wasting on cleaning up slurry

In certain applications where disposal of slurry is easy and hassle free, wet grinding can be considered. Flush and rinse all tools and parts with fresh water once completed.

For further information, please refer to SHIMICOAT Instruction for "Surface Preparations"

# Storage

SHIMICOAT RediLock Diamond Plates shall be cleaned and stored in toolbox with minimal exposure to moisture while not-in-use.

### **DISCLAIMER**

