FESTOOL

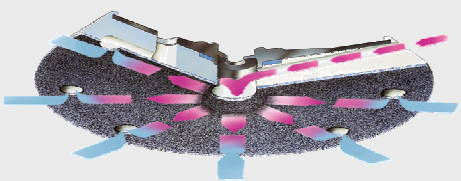
High quality abrasives

Festool System

Festool offers a fully integrated sanding solution for everything from aggressive stock removal to super fine, finish sanding. With a complete line of abrasives in seven different types, and grits ranging from 24 to 4000, Festool has the perfect product to meet your specific application needs. Festool abrasives, with their high tech coatings, provide maximum resistance to clogging and smearing, which means longer lasting abrasives and less reworking for you. Save money by reducing costs. Achieve consistent, high quality results. And, by adding Festool's portable dust extraction system, you'll protect your health, too.

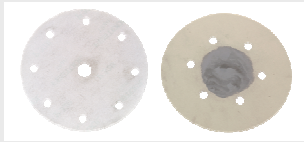
Unique JetStream System

Festool Jetstream technology reduces the surface temperature, which is one of many reasons why our abrasives last up to 30% longer. With our patented Jetstream pad design, air flows trough an additional hole in the center of the pad, moving dust to the outer holes where it is vacuumed up. The continuous air flow significantly improves dust extraction, prevents debris accumulation, clogging and increases abrasive life. When sanding dust is removed from the sanding surface, the abrasive wears more evenly and will last longer. Longer abrasive life and more reliable work results mean you spend less time sanding and achieve better results. With Festool's Jetstream technology and efficient dust extraction, Festool abrasives give you better results and save you both time and money.

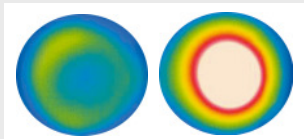


8-hole JetStream | 6-hole

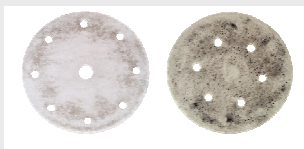
1. Less dust accumulation: the air flows continuously and removes the dust.



2. Lower surface temperature: the flowing air cools, which means that temperatures are up to 86° F lower than with competitors.



3. Less clogging: where there is no dust and heat, nothing can clog.



Uniform Abrasives

Abrasives with uniform dispersion prevent scratches and ensure the best surface quality and finest sanded finish. Festool abrasives mean less reworking and more reliable results.

StickFix System

With its unique hook-and-loop design, the StickFix System allows quick and efficient abrasive changes . Festool hook-and-loop provides a secure, non-slip bond for better results. Abrasives can be easily removed when desired. You'll save time when changing abrasives and you'll also save money by re-using slightly worn abrasives.

Tighter Tolerances

Festool abrasives conform to tighter tolerances than US CAMI standard abrasives. This produces a more uniform scratch pastern which results in the very best sanded surface possible.

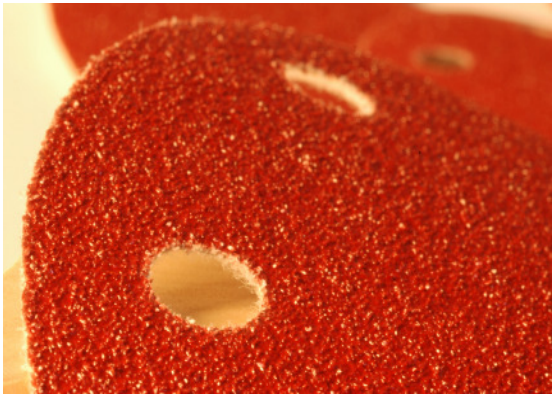
Which abrasive should you use?

Material*	Abrasive Name	Heavy Duty preparation	Coarse Sanding	Interme-diate Finish	Fine Finish	Super Fine Finish	Comments
		Type of Sanding					
wood	Brilliant 2	P40-60	P80-120	P150-180	P220-400		finest surface quality
	Rubin	P24-60	P80-120	P150-180			fast removal, fine surface quality
	Cristal	P40-60	P80-120				very fast removal, aggressive
	Saphir	P24-60	P80-120				very long lasting, high edge resistance
	Vlies	A100-280					scouring, cleaning surfaces
paint	Brilliant 2	P40-60	P80-120	P150-180	P220-400		anti-static, fine surface quality,
	Saphir	P24-60	P80-120				very long lasting, high edge resistance
	Cristal	P40-60	P80-120				very fast removal, aggressive
	Vlies	A100-280					scouring, cleaning surfaces
	Platin 2				S400-1000	S2000-4000	for high gloss finish, to prep for polish
	Titan 2		P80-120	P150-180	P220-1500	P3000	anti-clogging, fine surfaces **
high gloss lacquers	Platin 2				S400-1000	S2000-4000	For high gloss finish, to prep for polish
	Brilliant 2	P40-60	P80-120	P150-180	P220-400		anti-static, fine surface quality,
solid sur-face, Corion, Varicor	Titan 2	P40-60	P80-120	P150-180	P220-1500	P3000	all purpose, fine finish
	Platin 2				S400-1000	S2000-4000	for semi or high gloss finish
	Vlies	A280			S800		for satin or semi gloss finish
plastics, GPR, fiber glass, com-posites	Titan 2		P80-120	P150-180	P220-1500	P3000	anti-clogging, fine surface quality
	Saphir		P80-120				very long lasting, high edge resistance
	Cristal		P80-120				very fast removal, aggressive
	Platin 2				S400-1000	S2000-4000	super fine finish, high gloss
2-part-fillers, epoxy	Titan 2	P40-60	P80-120	P150-180	P220-400		anti-clogging, fine surface quality **
	Brilliant 2	P40-60	P80-120	P150-180	P220-400		anti-static, fine surface quality
	Cristal	P40-60	P80-120				very fast removal, aggressive
	Platin 2				S400		fine sanding
facades	Saphir	P24-60	P80-120				very long lasting, high edge resistance
	Cristal	P40-60	P80-120				very fast removal, aggressive

* check with material manufacturers for additional recommendations

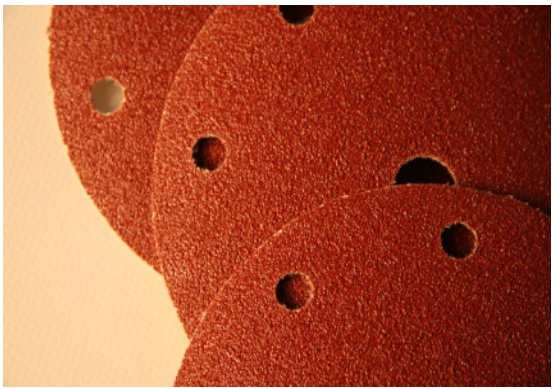
** stearated, for oil based or automotive

Rubin



Structure

Grit	aluminum oxide
Bonding	synthetic resin
Backing	e-wt paper
Grit range	P24 - P180
Grit coating	closed-coated
Bonding level	closed-leveled



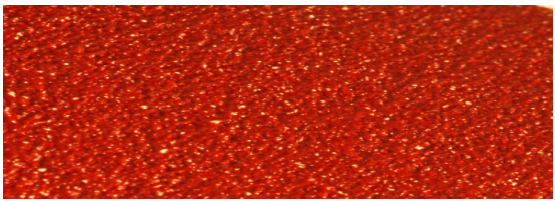
Applications

Wood	**P24 - P60**	heavy duty
	P80 - P120	intermediate
	P150 - P180	prep for finish

- Rubin was developed for natural wood, wood composites and veneers and has a special coating which sheds wood fibers. Use on hardwoods like oak or maple, soft woods like pine or fir, tropical woods like ebony or teak, as well as on wood-based products.
- Use **P24 to P60** for rapid removal and rough surface quality. High material removal means low surface quality. This preps surfaces for higher grits.
- Intermediate sanding is accomplished with grits **P80 to P120**. You will still have a fast removal rate while achieving good surface quality.
- **P150 to P180** for finish sanding. Remember that soft wood does not require as fine a sanded finish as hardwood. If you want to sand wood higher than P180, use Brilliant 2 from P220 to P400. Sanding higher than P180 is not recommended for a stains, as they will not penetrate as readily.

Tip

Use coarser grits for faster results; avoid skipping grits for best surface quality. Rubin's wood-specific coating means these abrasives are long lasting.



Brilliant 2

Applications

Wood	**P220 - P400**	fine finishes

For a finer sanded finish on wood and applications requiring grits above Rubin P180, use Brilliant 2.

Fillers & Finishes	**P40 - P60**	heavy duty
	P80 - P120	coarse sanding
	P150 - P180	finish quality
	P220 - P400	fine finishes

- Brilliant 2 is perfect for paint, fillers, primers and finishes like lacquers and varnishes; its antistatic coating is compatible with water-based products.
- Use **P40 to P60** for rapid removal, stripping stubborn paints and finishes and for rough shaping epoxies. Use higher grits to achieve finish quality.
- **P80 to P120** for prepping painted surfaces. Provides fast removal rate and good surface quality. Perfect grits for sanding fillers and drywall compound.
- **P150 to P180** to prep for fine finishes - adequate for most applications. Use higher grits to scuff sand between coats of finish.
- For the perfect finish, use grits **P220 to P400**. P320 is ideal for scuff sanding between coats.

Structure

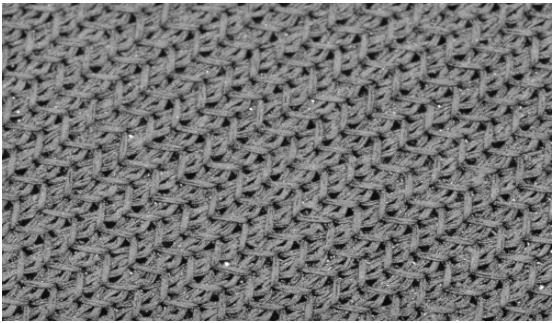
Grit	aluminum oxide
Bonding	synthetic resin
Impregnation	special bonding agent
Backing	b-wt, c-wt, d-w, e-wt paper
Grit range	P40 - P400
Grit coating	closed-coated
Bonding level	open-leveled

Platin 2

Applications

Fillers & Finishes	**S400 - S1000**	fine finish
	S2000 - S4000	super fine finish

- Platin 2 was specially developed for high gloss finishes. Prep for polishing with pumice and rottenstone. Feather auto-body fillers and prep for paint.
- For fine finishes, use from **S400 to S1000**.
- Use **S2000 to S4000** for super fine finishes.



Solid Surface	**S400 - S1000**	fine finish
	S2000 - S4000	super fine finish

- Platin 2 is excellent on solid surface: Avonite, Corian, Samsung, Varicor, etc.
- Work from **S400 to S1000** for semi-gloss finish.
- Use **S2000 to S4000** for high gloss finish.

Plastics, Fiberglass, Composites	**S400 - S1000**	fine finish
	S2000 - S4000	super fine finish

- Use **S400 to S1000** for matte to semi-gloss finish.
- Use **S2000 to S4000** to achieve high gloss finish or to prep for polishing.

Structure

Grit	silicon carbide
Coating	stearate
Bonding	synthetic resin
Backing	foam-fiber
Grit range	S400 - S4000
Grit coating	open coated

Surface Structures

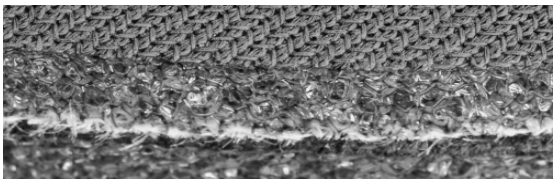
Work steps of sanding surface

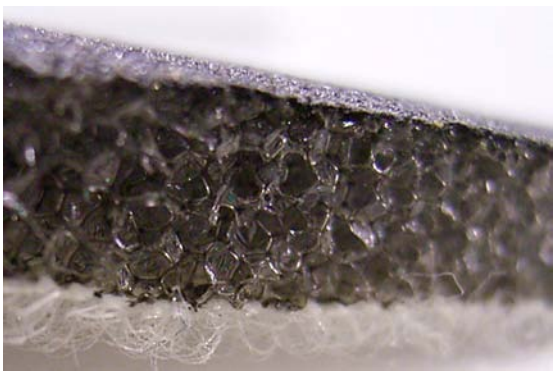
1. Microscopic view of surface structure before using Platin 2.

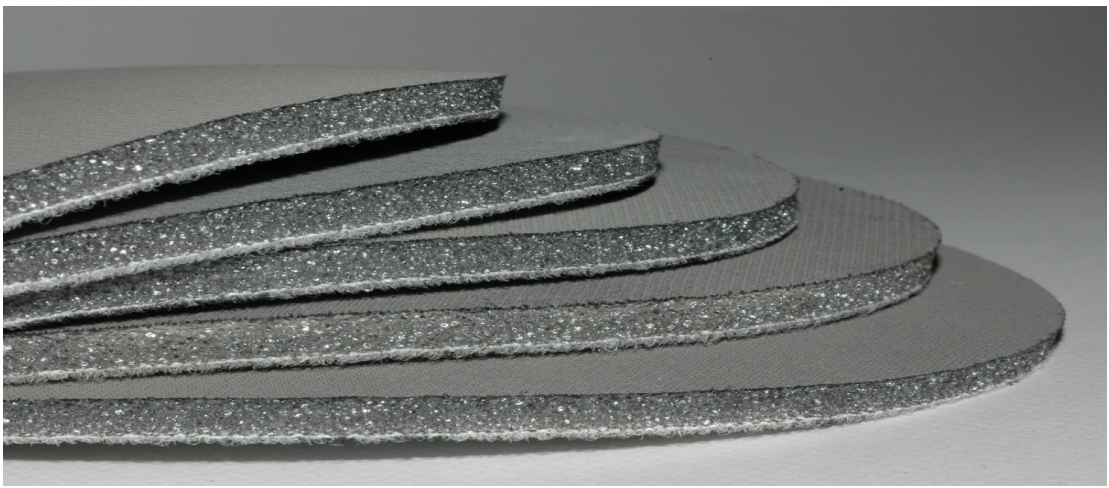
2. Platin 2 doesn't change the surface structure - it adapts to it.

3. Platin 2 minimizes surface imperfections; this results in a perfect finish.

With Platin 2, you'll save time achieving a super fine finish .







Titan 2

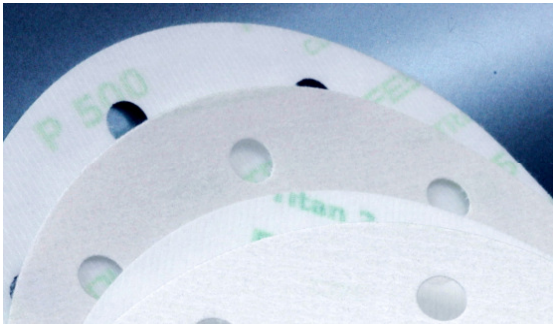
Applications

Solid Surface	**P40 - P60**	heavy duty
	P80 - P120	coarse sanding
	P150 - P180	intermediate
	P220 - P1200	matte, semi-gloss
	P3000	high gloss finish

- Use **P40 to P60** when scribing to fit.
- **P80 to P120** for sanding glue lines and seams.
- Use up to **P240** for a matte finish; fine finish with Vlies.
- Sand up to **P1200** for a semi gloss finish.
- High-gloss: use up to **P1500** (6") or **P3000** (5"). and finish with Platin 2.

Plastics, Fiberglass, Composites	**P80 - P120**	coarse sanding
	P150 - P180	intermediate finish
	P220 - P1000	fine finish
	P3000	super fine finish

- Use **P80 to P120** for rapid material removal or rough trimming on plastics and fiberglass repairs. Higher grits improve surface quality.
- For intermediate sanding begin with **P150 to P180.** Begin scratch repairs in this range or sand contours on injection molded plastics.
- Use **P220 to P1000** to achieve a fine finish..
- Use **P3000** for super fine finish work. Platin 2 will take you up to S4000, after which you can apply polishing compounds with our felts or sponges.



Applications

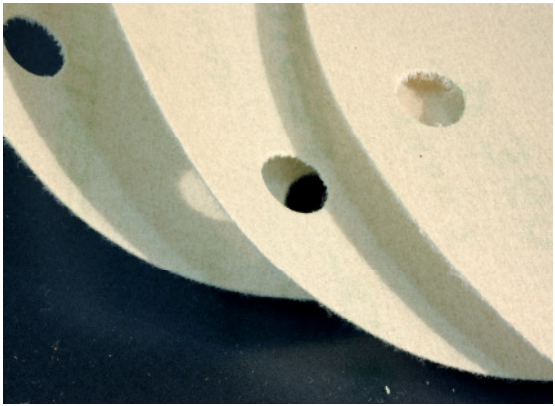
Fillers & Finishes	**P40 - P60**	heavy duty
	P80 - P120	coarse sanding
	P150 - P180	intermediate
	P220 - P1000	fine finish
	P1200 - P3000	super fine finish

- Titan 2 is excellent for automotive finishes: paints, fillers, primers and lacquers and preferred for all oil-based paints and finishes.
- Use **P40 to P60** for stripping and for rough shaping. Use higher grits to achieve finish quality. For more aggressive removal, see Cristal.
- Use **P80 to P120** to sand down to the surface or for sanding fillers. Provides rapid removal along with improved surface quality.
- Use **P150 to P180** for intermediate sanding of paints and primers; this is sufficient for final finish for most applications.
- For a finer finish, use **P220 to P1000** to achieve superior surface quality. Grits higher than P800 promote smooth underlying surface structures.
- With **P3000**, you can sand out dust inclusions and surface imperfections on paints and gel coats.

Titan 2

Structure

Grit	aluminum oxide
Coating	stearate
Bonding	synthetic resin
Backing	b-wt, c-wt, d-wt paper
Grit range	P220 - P1500
Grit coating	semi closed coated
Bonding level	open leveled
Backing	latex

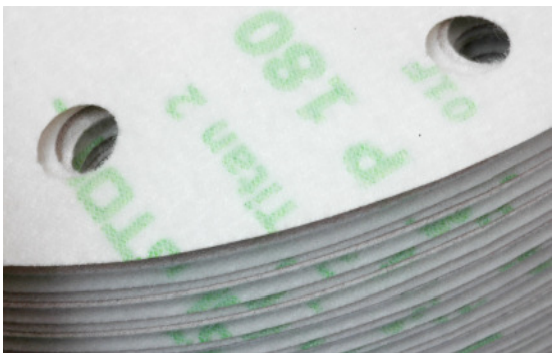


Important

Due to stearate coating, do not use Titan 2 for water-based finishes. Use Brilliant 2 for water-based.

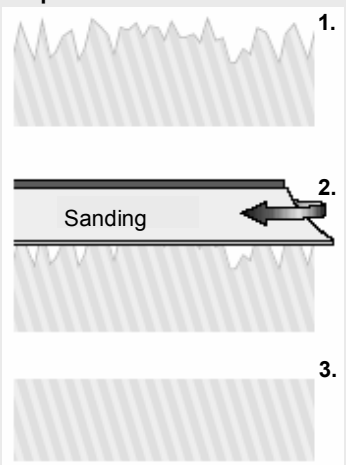
Unique Feature

Titan 2 has a high quality latex coating on the backing which increases the flexibility of the abrasive and allows it to adapt to surface contours. The latex adds a cushion between the backing and the bonding and prevents grits from breaking off. This assures high surface quality, longer operational life, more reliable work results and less reworking for you. Titan 2 is also excellent on new finishes.



Planar Surface Sanding

perfect sanded surfaces



1. With Titan 2 you can sand finished surfaces 'planar' to achieve the best surface quality possible.

2. Titan 2 removes microscopic uprisings or surface irregularities.

3. The result is a entirely 'planar' or perfectly flat surface.

With Titan 2 you can quickly achieve clean and reliable work results, saving both time and money.

Vlies

Applications

Wood, Metal	**A80 - S800**	preparation

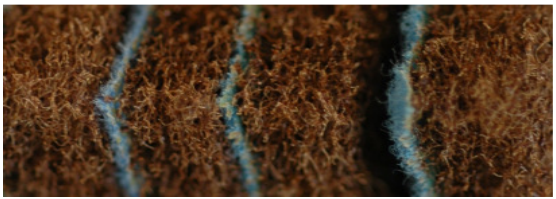
- Vlies is excellent for deep pore cleaning on natural woods, veneers and is great for use on contours. Perfect for cleaning and de-rusting metal.
- Use **A280** to scuff sand between finish coats. Polish aluminum and soft metals to a matte finish. For finer finish on metal use **S800**.

Paint	**A100 - A280**	preparation

- Use Vlies **A80 to A280** to prep sand contours, depending on desired surface quality.
- Use **A280** with a light touch for scuff sanding.

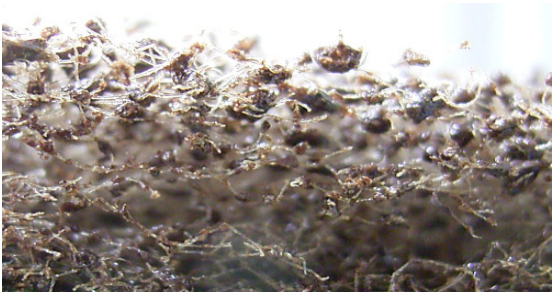
Solid Surface	**A280**	matte finish
	S800	semi-gloss

- Use **A280** (maroon) for matte finish.
- Use **A800** (gray) for semi gloss.



Structure

Grit	aluminum oxide or silicon carbide
Coating	stearate on silicon carbide only
Bonding	synthetic resin
Backing	elastic fiber mat with embedded abrasives particles
Grit range	A80, A100, A120,A180, A280, S800



Saphir

Applications

Wood	**P24 - P50**	heavy duty
	P80 - P120	coarse sanding

- Choose **P24 to P60** for extreme conditions: hogging out material or sanding heavily worn, hard surfaces such stairs. Offers exceptional service life due to high tear-resistant fabric backing. Outlasts other abrasives, particularly near edges or on uneven surfaces. Ideal for wooden boat hull work.
- Work up to **P80 or P120** to prep for finish sanding. Use Rubin for improved surface quality or Cristal for radical material removal.

Paint	**P36 - P50**	heavy duty
	P80 - P120	coarse sanding

- Use **P40 to P60** for sanding hard surfaces, stubborn finishes, well set fillers or gel-coat layers. For best surface quality use Brilliant 2. For radical removal, try Cristal.
- Use **P80 to P120** to prep for finish sanding. Great on uneven surfaces because of its resilient fabric backing and bonding coat.

Plastics, Fiberglass, Composites	**P80 - P120**	heavy duty

- Use **P80 to P120** for extreme conditions and to sand fiberglass reinforced and carbon fiber reinforced plastics. Great range of grits works for fast removal where surface quality is not paramount.

Applications

Concrete, Steel	**P36 - P50**	heavy duty
	P80 - P120	coarse sanding

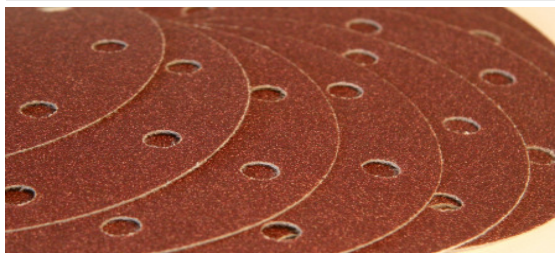
- Use **P24 to P50** on aggregate surfaces like stucco or to remove corrosion from weathered steel. Durable and heat resistant bonding coat and tear-resistant fabric backing ensure long service life. Great for hull work on boats.
- Use **P80 to P120** to prep for finish. For fine sanding see Brilliant 2 or Titan 2.

Structure

Grit	aluminum oxide
Bonding	synthetic resin
Backing	Fabric reinforced
Grit range	P24 - P120
Grit coating	semi-closed coated
Bonding level	closed leveled

Tip

Use **P24** on those tough jobs where grinder-like removal is required. Work your way up through the grits to improve surface quality. Use on hard materials and in difficult areas where standard abrasives just don't hold up.



Cristal

Applications

Wood	**P40 - P60**	heavy duty
	P80 - P120	coarse sanding

- Use **P40 to P60** for rapid removal, ideal for rough shaping. Make short work of leveling large surfaces. Switch to Rubin for finish sanding.
- Use **P80 to P120** when a softer touch is required. Great transitional grits for aggressive material removal and quick transition through grits. Finish off with Rubin for fine sanding.

Paint	**P40 - P60**	heavy duty
	P80 - P120	coarse sanding

- Use **P40 to P60** to strip old finishes. Excellent for exterior paint problems like cracking and alligator skin. Strip flooring, automotive paint and boat hulls. Ideal for rapid removal without clogging.
- Use **P80 to P120** to prep for finish sanding. Good for stripping without surface problems. Finish with Brilliant 2 on coatings or Rubin for bare wood.

2 Part-fillers, Epoxy	**P40 - P60**	heavy duty
	P80 - P120	coarse sanding

- Use **P40 to P60** for rapid removal of fillers and rough shaping. Long lasting, won't clog.
- Use **P80 to P120** for finer work and fairing or feathering. Finish with either Brilliant 2 or Titan 2.

Plastics, Fiberglass, Composites	**P80 - P120**	coarse sanding

- For rapid removal and coarse sanding on large surfaces. Open-coat reduces surface heat.

Structure

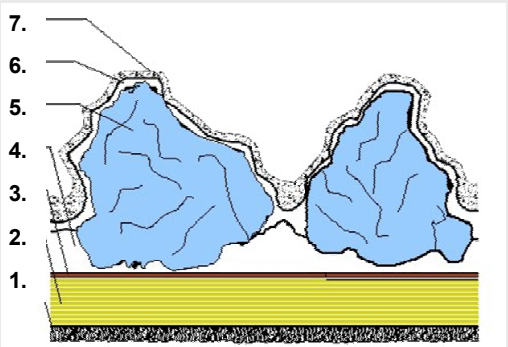
Grit	aluminum oxide
Bonding	phenolic resin
Impregnation	special bonding agent
Backing	b-wt, c-wt paper
Grit range	P24 - P120
Grit coating	open coated
Bonding level	open leveled

Tip

Cristal employs a durable aluminum oxide, flexible bonding material and no load coating which makes it the top performer for rapid removal. Stays cool, won't clog. Makes quick work of tough jobs.

Technical Composition

At Festool, we use only top-grade materials for our abrasives. This ensures the finest sanding results and extremely long-lasting abrasives.



1. StickFix
Our unique hook and loop design ensures a secure hold, fast change and re-use of marginally worn abrasives. As a result, you'll get the most out of your abrasives and reduce replacement costs.

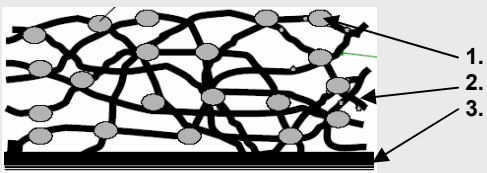
2. Backing Material
Festool has different backings to match a broad range of applications, from rapid material removal to superior surface quality. Backing materials are:

- **Paper**
  Festool uses only top-grade paper of varying weights to assure high tear resistance, durability and superior surface quality. Using only high quality materials assures the best and most reliable work results; this saves you time and money. The different paper weights we use are:

  - b-wt 115 g/m^2
  - c-wt 130 g/m^2
  - d-wt 165 g/m^2
  - e-wt 185 g/m^2

- **Fabric**
  Festool uses a special x-type woven fabric which ensures its abrasives are long-lasting when used under tough conditions and on uneven surfaces. The fiber increases strength and prevents the abrasive from tearing at the edges. This backing is excellent for heavy duty jobs and results in a very long operational life and considerable cost savings.

- **Fiber**
  Festool uses a special elastic fiber mat. This mat is embedded with abrasive particles. Festool's name for this abrasive mat is Vlies. With Vlies, it's easier to achieve consistent results on complicated contours.



1. Grit; **2.** Fiber; **3.** Hook and loop

- **Foam and fiber**
  A **foam backing** compensates for uneven pressure to protect the surface and allow you to achieve perfect results. Foam and fiber works great on transitions, too. The foam efficiently adapts to the work piece contour. This produces reliable work results and high surface qualities. The special velour on top of the foam assures the best grit bonding and prevents the edges from tearing. Like the foam, it is air permeable and open pored. It extracts almost 100% of the particulate through the backing and ensures a clear view of the work piece. You will achieve better, more reliable work results and less reworking.

3. Impregnation
We saturate the backing material with a special solution to fill up the pores. This impregnation assures the best bonding and prevents the backing from being penetrated by the bonding. Impregnation gives the bonding better adhesion and protects grits from breaking off, especially on the edges. Impregnation extends the abrasive's useful life which help save you money by reducing replacement costs.

4. Base bonding
Abrasives must have good bonding to be long lasting. The base bonding secures the grains to the backing material and prevents the grits from breaking off. We use only high quality material to give our abrasives longer life and this lowers your replacement costs. For matched bonding, we use different materials depending on the abrasive.

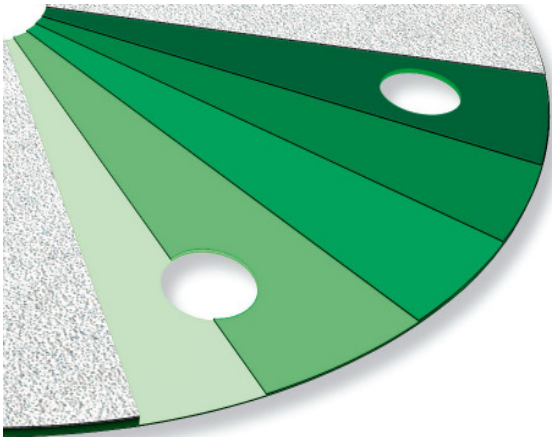
- **Synthetic resin**
  Synthetic resin guarantees high flexibility and allows the abrasive to better adapt to the sanding surface. You will see superior results which means less reworking and more time savings. The high strength of synthetic resin prevents the grits from breaking off and ensures high durability. We utilize full synthetic resin and synthetic resin combinations to assure best results and to provide long operational life.
- **Phenolic resin**
  Phenolic resin is highly heat resistant. It provides a strong yet flexible bond which prevents scratching along the edges. This high quality bond prevents grits from breaking off even under the toughest conditions. This extends the service life of the abrasive and saves you money.

5. Sanding grit
Festool uses high quality silicon carbide or aluminum oxide. These grits produce the best material removal rates, highest surface quality and greatest durability. Every application requires specific efficiencies which is why we offer a complete system of abrasives. You save on replacement costs and achieve better results with less reworking.

- **Silicon carbide** is almost as hard as a diamond. The particles are sliver-shaped and have the ability to cut aggressively on a wide range of materials while using little pressure. Because it resists heat well, silicon carbide holds up during demanding applications. The particles have consistent size and grading: they provide the best results for high quality surface finishes and produce consistently reliable work results.
- **Aluminum oxide** is hard, sharp, tough and remarkably durable. The particles are wedge-shaped which allows the grains to penetrate at a high cut rate. Aluminum oxide is friable, which means that as it heats up, it breaks down at a controlled rate, producing a fresh cutting edge. Aluminum oxide's high material removal coupled with extreme durability saves both time and money.

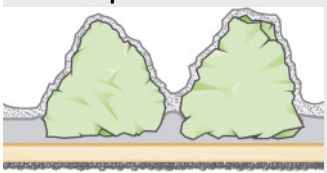
6. Top bonding
Top bonding prevents grits from breaking off and supports their adhesion to the base bond. Bonding agents include synthetic and phenolic resins. This creates greater resistance to tear out and a longer service life.

7. Coating
Our abrasives receive a final top coat specific to their application. These coatings prevent clogging, smearing and extend the abrasive's useful life. This lowers your replacement costs and produces better results. The bottom line is that you will spend less time sanding and finish sooner.



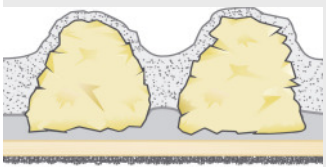
Bonding Level

Open leveled



Open leveled means that the grains are lightly covered providing a relief for swarf just as gullets on a saw blade clear the chips. This enables efficient dust extraction and prevents the abrasive from clogging which extends its useful life. That means better results and savings on replacement costs.

Closed leveled

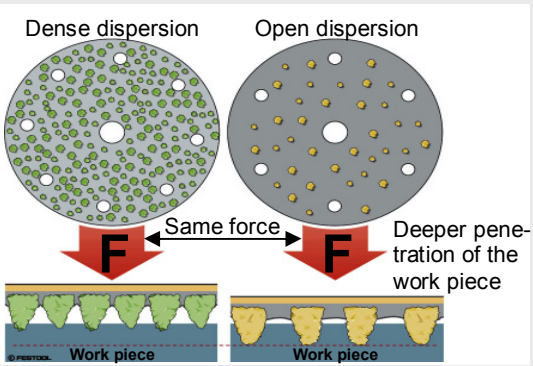


Closed leveled means that the coating fills the 'valleys' between the grains leaving just the 'peaks' exposed. The grains are better bonded and highly stable which prevents them from breaking off. The abrasive lasts longer under difficult conditions and you save on replacement costs.

Dispersion

Festool offers you the perfect abrasive for whatever your application. Our abrasives range in dispersion levels to better facilitate a broad range of applications. The right dispersion level assures the best and most reliable sanding results as well as providing high sanding capacity.

- **Open-coat** means fewer abrasive particles on the surface. Having more space between the grains provides clearance for sanding swarf, prevents clogging and ensures a high material removal rate. The sparser the grit coating, the greater the material removal rate and quicker material removal saves you time.
- With **closed-coat** abrasives, the concentration of grains is greater and thus the space between the grits is smaller. This results in a softer scratch pattern and a better quality surface. The denser dispersion provides a better sanded finish and helps you produce the finest sanded finish possible - every single time.
- Festool also has some abrasives with a **semi - closed-coat** for a combined high removal rate and good surface quality. These abrasives give you the best of both worlds.



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