

Endorsed by



THE ALDERSON PORTABLE SANDER

Quick Start General Information

1 RELATIVE COST COMPARISONS BETWEEN TRADITIONAL DRY SANDING DISCS & ALDERSON SANDING DISCS.

The following information is based on actual results achieved through testing and customer feedback over the last 12 months.

The Alderson sanding discs must be used with water from the sanding machine. The water keeps the disc and substrate cool eliminating disc clogging and substrate blistering this significantly extending the life of each disc. It also eliminates harmful dust.

Not all painted surfaces are the same, some are harder and some a lot softer, so actual results may vary.

ACRYLIC SANDING DISCS

A single sided 60 grit disc can sand between 20 and 40 square meters of acrylic painted weatherboards. With the disc costing \$20 the cost per lineal meter is between 5 and 10 cents. This compares with a dry sanding orbital which can achieve between 1 and 5 lineal meters before it clogs or becomes ineffective. With a sheet of dry sanding paper costing around \$1.80, the dry sanding cost per lineal meter is in the range of 36 cents to \$1.80. That cost is the direct cost not including any allowance for backing discs or vacuum bags. Most of the productivity gains come for the Alderson's sanding speed. It takes about 60 seconds to sand 1 square meter (6 seconds per lineal meter). That is 6 around times faster than dry sanding.

PAINT STRIPPING DISCS

Two Alderson stripping discs must be used to strip paint and prepare the surface for painting. The first disc to use is either a 16#, 24# or 36# primary stripping disc. These discs remove the layers of paint very quickly but do leave score marks. These score marks are then removed with either a 60# or 80# finishing disc – no need to wait for the surface to dry and then dry sand. Using these two discs they can remove between 10 and 20 square meters of paint. (providing the machine is used correctly). Using the combined disc cost of \$120, the cost per lineal meter is between 60 cents and \$1.20. There is no sanding process to compare with but compared with using several coats of stripper and the time to scrape off the old paint with a linbide scraper, the Alderson system, at a rate of 6 minutes per square meter (36 seconds per lm), and between 60 cents and \$1.20 per lineal meter for the dry sanding discs, is far more cost effective. Effectively the Alderson sanding machine is between 6 and 8 times faster than anything else.



Furthermore, using the Alderson system, complete with its Enviromat, means that there is no dust and all the paint sediment is collected in the Enviromat. New Zealand Master Painters have

now endorsed the Alderson sanding system as their preferred method for the removal of lead based paints.

SUMMARY	Alderson Sander	Dry Sanding	Linbide + Dry Sanding
Acrylic Preparation	5 to 10 cents per lm	36 cents to \$1.80 per lm	Not Applicable
Acrylic Sanding Time	6 seconds per lm	36 seconds per lm	Not Applicable
Paint Stripping	65 cents to \$1.20 per lm	Not Applicable	
Paint Stripping Time	1 minute per lm	Not Applicable	6 minutes per lm (based on two coats of stripper, wash-down & dry sand)

2 RANGE OF SANDING AND POLISHING DISCS

There is a full range of ALDERSON discs available. All are available in 150 mm and some in 200 mm diameter. All of them for use with water. **It is important that you keep the discs flat on the surface being sanded.**

All painted surfaces are different. Some are hard, some are soft, some have just acrylic, and some have acrylic and oil based or even lead based paints. Some just need a relatively light skimming to remove flaky paint before repainting, others need stripping with others somewhere in between; for example removing several layers of acrylic back to sound enamel.. Some houses only need stripping on the sunny side. We have a comprehensive range of discs to deal with all of these situations.

(A) Acrylic Sanding Discs.

These are all sand screen based discs and come in 60, 80 and 100grit grades. With the use of water and the Alderson's sanding speed, the 60 grit discs produce a result similar to what a 120 grit dry sander produces. Similarly the 100# produces a result similar to a 200# dry sand. It is best to start with the 60 grit discs because they are a lot more productive than the other discs which are better suited to final finishing prior to the application of the final coat of paint.

These discs are not as effective for sanding enamel based painted surfaces. Particularly for old hard enamel, we recommend using a 60# or 80# stripping disc. (See (B) below).

These discs should only be used for acrylic paint preparation not paint stripping.

There are three types of acrylic sanding discs.

1. "Single Sided Combo" this has Sand Screen just on one side. This can be used with the orbital attachment but must be attached with the spring washer under the fixing nut when used with the orbital attachment.
2. "Double Sided Combo" has Sand Screen on both surfaces. This disc should **not** be used with the orbital attachment because it has no fixing nut. **It must be used with the backing plate provided.**



SSC150-60, 80 or 100#



DSC150-60, 80 or 100#

3. “The Edge Combo” has Sand Screen on one side but it also has abrasive material on its edge that allows the sanding of a weatherboard and simultaneously sands the underside of the weatherboard above it. This disc should **not** be used with the orbital attachment because the edge, running or bumping the under edge of a weatherboard can cause the orbital’s nut to unwind.



TEC150-60, 80 or 100#

- 60 #:** This removes large amounts of flaky or chalky paint leaving a traditional 120 grit finish, ready for painting. Always try this disc first. For weatherboards, concrete block walls, ply Sands through mould, lichen, red mould, antifouling.
- 80 #:** Use for fine sanding weatherboards, pine, cedar and even tin where the boards and painted surface is in relatively good condition.
- 100 #:** For final sanding, sanding filler, undercoat, cedar, tin weatherboards or dry sanding.

(B) Stripping Discs.

These “Shredder” discs come in a range of five discs – 16#, 24#, 36#, 60# and 80# and are used for stripping multiple layers of paint back to bare timber. Trial different discs until the best result is achieved

Never use stripping discs until you can competently use the machine. Practice first with an Acrylic 100# disc.

The 16#, 24# and 36# discs are the primary discs used for stripping paint back to bare timber. They do leave scratch marks but these can easily be removed using the 60# or 80# finishing discs depending on the softness or hardness of the exposed timber. The 60 and 80 grit discs have abrasive material on their edge that allows the sanding of a weatherboard and simultaneously sands the underside of the weatherboard above it.

16 to 36 #: The 16, 24 & 36 grit shedding discs are the main stripping discs and their effectiveness depends entirely on what sort of paint and how many layers are to be stripped. The 36 grit disc can be more effective stripping off layers of acrylic down to say an enamel base. It does not “score” the surface as much as the 16 grit disc does. On the other hand the 16 grit disc is more effective when you need to remove all the paint. At one end of its range the 16 grit disc can strip many square meters of acrylic (soft) based paint but in some cases, at the other end, it will struggle to strip 10 square meters of really old hard painted surfaces. Some of these old painted surfaces are like glass and these are the hardest to totally remove by any other means, so if it is hard for the 16# disc it is relatively just as hard as say scraping or burning off. In these cases the disc can be used in conjunction with stripper. Apply a coat of stripper and preferably leave overnight, then use the 16 grit disc without scraping off the stripper. The disc will be a lot more effective and in most cases only the one coat of stripper is all that will be required. When using this disc don’t try and



TSC150-16#



TSC150-24#



TSC150-36#

get every last bit of paint off. 80 – 90% off in the first run through is sufficient then follow up with a 60 or 80 grit finishing disc. **Warning: Do not push too hard using the 16 grit disc; just let it do all the work.**

60 & 80 #: Because of the score marks left by the 16 grit discs and to a lesser extent, the 36 grit discs, there is a need to follow up with a 60 or 80 grit finishing disc. These discs will remove the remaining paint and do the final surface preparation ready for painting. In some cases the 60 grit disc will strip softer painted surfaces or surfaces with 3 or 4 layers off just as effectively as the 16 grit disc. Just try them to see how they work in each different situation. Both of these discs have an abrasive edge so that the undersides of the boards are sanded as the flats are sanded. It is false economy to use the 16# then wait for the timber to dry and then dry sand with an orbital. Just get straight in with the 60# or 80#, hose down and the timber is virtually ready for painting.



TSC150-60#



TSC150-80#

(C) Other Discs.

- a) There are three “Grunty Rippa” discs. **They are not a substitute for any of the shredder discs because they are around 3 -4 times slower and generally don’t last as long.** Putting this in perspective, the labour cost for a stripping disc is 42 cents per lineal meter but \$1.26 to \$1.66 per lineal meter for a Grunty Rippa. Therefore the break-even point is just 20 lineal meters or 2 square meters before the Grunty Rippa cost equates to a shredder disc.

We recommend that these discs be used in areas likely to cause damage to any of the other Alderson discs. For example use the black discs around soakers, joiners and flashings prior to starting with any sand screen based discs. The black disc is softer and gentler than the purple disc which is the hardest. The blue disc is in between. These discs can be used with the orbital attachment providing the spring washer is used. These discs have 22 mm holes in the centre and so must be attached to the machine using the special washer under the fixing nut.



GRBLK 150-46# Soft



GRBLU 150-46# Medium



GRPPL 150-46# Hard

(D) Enviromats.

Our Enviromats collect the paint flakes but allow the water to flow through; this eliminated any contamination of surrounding ground areas. Weed mats are not a substitute – the water and contaminants flow off the weed mat and the Accident Compensation Corporation consider them to be dangerous, being very slippery, especially on sloping ground.

3 STARTING THE ENGINE

- Uses new and clean 96 or 91 Grade petrol mixed with two stoke oil ratio of 25:1. “Old” fuel can have moisture in it which will cause starting problems.
- To start, turn on/off switch to on, prime carburettor (4 or 5 pumps up to 10 pumps – more than 4 or 5 does no harm)
- Set choke on and pull starter until engine starts – once started return choke to normal position.
- Throttle regulator controls maximum and minimum revs – undo the screw for maximum revs.

4 BASIC FUNCTIONS OF THE MACHINE

- Several different sanding discs can be used – Refer to Owner’s Manual or Display Board
- Sanding Head can be rotated at 90 degree turns
- The machine comes with an extension and an orbital attachment
- A petrol container is provided to mix the fuel and oil
- The use of water is very important – make sure there is sufficient flow of water. The water keeps the surface cool preventing blistering and stopping the disc from clogging.

5 OPERATING THE MACHINE

- Make sure there is a good flow of water.
- Always keep the disc flat of the surface being sanded – **never work the disc on its edge.**

We recommend that you learn how to use the machine by starting with an Acrylic sanding 100# disc which will not cause any significant damage while you get used to keeping the disc flat on the surface being sanded.

- Use the shoulder strap, properly adjusted, to take the weight of the sander. Hold the machine close to your body and “lock” your arms, move the sanding head by swaying your body from the hips rather than swinging the machine with your arms like you would with most dry sander. **This is essential in helping to keep the disc flat on the surface.**
- Use a sweeping motion swaying your hips to help keep the disc flat – do not “nibble” at the surface like when using an orbital sander.
- Do not push hard on the surface being sanded – let the disc do the work.