Manifold and gun filters

When selecting the right filter set up for your spray system there are a few basic rules that are well worth following. If your tip size is...

- 1. .007 thou to .011 thou, use a 200 mesh filter (red).
- 2. .012 thou to .014 thou, use a 100 mesh filter (light blue).
- 3. .015 thou to .021 thou use a 60 mesh filter (black).
- 4. .023 thou or more for high build coatings, use a 30 mesh filter (grey).

Using the right filter and regularly cleaning it will reduce tip clogging.

Filters must be free of all material after cleaning – if they aren't then it's time to replace them.

Airless hoses

Selecting the best diameter hose to meet your length requirements is critical to getting a good spraying pressure. The greater the hose diameter the greater the pressure at the gun. If you decrease the diameter or reduce the hose length, the pressure at the gun will reduce.

When joining hoses together, connect the largest diameter hose to the sprayer, then the smaller hose to that.

For example, unit connected to 3/8 hose connected to 1/4 inch hose will give maximum pressure when spraying.

High build coatings require a larger diameter hose (3/8) to minimise the risk of tailing.

Health and safety

At all times use and follow the manufacturer's directions and wear the appropriate gear.

Cleaning

When using waterborne coatings, it is good practice to clean your unit daily.

For best results, follow these steps:

- 1. Flush your unit with water to remove paint from the unit and hose.
- 2. Drop the pressure and remove all filters. Clean them and store them safely in your toolbox.
- 3. Put the unit back together without the filters. Clean excess paint off the pick-up shaft.
- 4. Remove the dirty water and replace with a bucket of fresh water, using hot water if possible. Mix in 2 capfuls of Resene Quick2Clean Paint Equipment. Flush through the unit until clean.
- 5. Mix a small amount of fresh water in a bucket with Resene Pump Protector. Run through your unit.
- 6. Drop the pressure and store your unit.

Can you afford the high cost of using a worn tip?

Choosing the right spray tip is essential for a quality finish no matter what material is being sprayed, but don't forget to check and replace your tips as all tips will wear with normal use. It's impossible to say how long a tip will last, because there is a huge difference in abrasiveness from one coating to another. Waterborne coatings are usually more abrasive than lacquers or enamels and paint is sprayed at different pressures so some tips will wear faster than others. Abrasive material sprayed at too high a pressure or through too small a tip causes faster tip wear, which wastes time and paint.

Just think... A contractor spraying with a worn tip uses, on average, 20% more paint and 20% more labour. In short, while you'll pay a bit more money in tips you'll pay a lot more if you don't.

How do you determine if a tip is worn?

When a spray tip wears, the orifice gets bigger and rounder, which makes the fan pattern smaller. When the fan has lost 25% of its original size, it is time to replace the tip. When a tip with a 12 in. (305mm) fan wears down to a 9 in. (230mm) fan, it outputs 30% more paint on 25% less area. Continuing to spray with a worn tip makes the painting take longer, you use more paint and the finish may be uneven and have runs.



Five (six) ways to extend tip life

- 1. Spray at the lowest pressure that atomises the material.
- 2. Strain the material before you spray it.
- 3. Use the correct size filters.
- 4. Clean the filters after every use.
- 5. Clean the tip with a soft-bristled brush.

6. Work less (only an option if you don't have a mortgage to pay off!) Always make sure you have the right tip in good nick otherwise your profits will be sprayed away in excess paint and labour.



the paint the professionals use

1800 738 383	0800 737 363
resene.com.au	resene.co.nz

Getting the best out of your spray equipment

Airless tip guide



01/24

Size does matter

We all know that applying paint by airless spray application can be a very speedy way of getting a lot of paint on the surface very quickly, however you must make sure everything is set up just right otherwise you'll end up using up more paint and time than you planned. One of the keys to successful spray application is making sure you have the right equipment to do the job including the right tip.

Of course there are what seems like fifty thousand different options in this area so to help you wade through all the info we've picked out the important bits for you. This handy guide applies to airless spray application only, because as we all know pressure pot and HVLP are a whole different kettle of fish...

If you have always wondered what all the numbers mean in the tip descriptions here's the easy way to decipher them... Take the first digit and multiply by 2 - that gives you the width of the fan. For example, a 515 would be a 10 inch fan (i.e. 5×2). The second and third digits tell you the size of the hole, therefore a 515 would be a 15 hole size.

Tip 1: The orifice size alone determines flow rate of tip

If you want to cover a greater area with each pass do not try to do this by backing the gun away from the surface. The further away you are the less paint will reach the surface and the more you'll waste as overspray. Instead, use a tip with a larger fan and orifice. Remember if you use a tip with a larger fan but not a larger orifice, the build will be less and you'll have to move the gun slower.

Tip 2: Make sure tip and sprayer are rated for each other

Always make sure that the flow rate for the tip is lower than the maximum flow rate for the sprayer. If the tip flow rate is LESS than the sprayer flow rate you're all ok to go. If the tip flow rate is GREATER than the sprayer flow rate, you'll have to change either your tip or sprayer so that the sprayer flow rate is greater than the tip flow rate.

Recommended tip sizes for common coatings

Material	Tip size (in.)		
Stain or lacquer	.011 to .013		
Solventborne paint	.013 to .015		
Waterborne paint	.015 to .019		
Heavy acrylic and smooth elastomeric	.021 to .025		
Elastomeric and block filler	.025 to .035+		

Recommended tip sizes for Resene products to get you started

These are good guidelines for exterior/interior work based on the average flow of a unit. You may wish to use higher or lower tip sizes; example: for doors you may choose to use a FFLP 414 tip and a FFLP 310 tip for the frames. Please don't hesitate to contact us for further advice to suit your specific project requirements.

Power cords Although most units are rated at 10 amps it is recommended that you use a power cord 25 metres or shorter, rated up to 25 amps. Use a ProGuard and electrical surge protection plug, especially in smaller units, such as 390, 395, 490, 495 and 595. If you need to work over a longer distance, add additional hose not cord. See hose information overleaf.

Product	Data Sheet	Hose (no less than)	Filter	LP tip (yellow)	FFLP tip (green)	Safety mask	
Waterborne topcoats							
Aquaclear	D59	1/4	60 mesh (black)	-	414	PV2	
Ceiling Paint	D305	1/4	60 mesh (black)	517	516	PV2	
ClinicalCote	D318	1/4	60 mesh (black)	515	516	PV2	
CyberCote	D323	1/4	60 mesh (black)	515	516	PV2	
Enamacryl	D309	1/4	60 mesh (black)	413	414	PV2	
X Metallic	D309a	1/4	30 mesh (grey)	-	516	PV2	
Hi-Glo	D31	1/4	60 mesh (black)	515	414	PV2	
umbersider Low Sheen	D34	1/4	60 mesh (black)	515	516	PV2	
umbersider Matt	D327	1/4	60 mesh (black)	515	516	PV2	
ustacryl	D310	1/4	60 mesh (black)	413	412	PV2	
Room Velvet	D320	1/4	60 mesh (black)	517	516	Carbon filter	
Sonyx 101	D30	1/4	60 mesh (black)	515	516	PV2	
SpaceCote Flat	D314	1/4	60 mesh (black)	515	516	PV2	
SpaceCote Low Sheen	D311	1/4	60 mesh (black)	515	516	PV2	
Summit Roof Commercial Spray Satin	D315S	1/4	60 mesh (black)	515	516	PV2	
Summit Roof Metallic	D315M	1/4	30 mesh (grey)	517	-	PV2	
Summit Roof Semi-Gloss	D315S	1/4	60 mesh (black)	515	516	PV2	
Zylone Sheen	D302	1/4	60 mesh (black)	515	516	PV2	
Primers/sealers/undercoats							
Acrylic Undercoat	D404	1/4	60 mesh (black)	515	516	PV2	
Broadwall 3 in 1	D810	3/8	30 mesh (grey)	523	-	PV2	
Broadwall Surface Prep & Seal	D807	1/4 or 3/8	30 mesh (grey)	523	-	PV2	
Broadwall Waterborne Wallboard Sealer	D403	1/4	60 mesh (black)	517	-	PV2	
Concrete Primer	D405	1/4	60 mesh (black)	517	-	PV2	
Decorator First2Finish	-	1/4 or 3/8	30 mesh (grey)	517	516	PV2	
Enamel Undercoat	D44	1/4	60 mesh (black)	515	414	Carbon filter	
Galvo One	D41	1/4	60 mesh (black)	515	414	Carbon filter	
Galvo-Prime	D402	1/4	60 mesh (black)	517	516	PV2	
aminate and Melamine Primer	D414	1/4	100 mesh (blue)	411	412	Carbon filter	
imelock	D809	1/4	60 mesh (black)	413	414	PV2	
Quick Dry	D45	1/4	60 mesh (black)	515	516	PV2	
Sureseal	D42	1/4	100 mesh (blue)	413	414	Carbon filter	
Timber Surface Prep	D814	3/8	30 mesh (grey)	523	-	Carbon filter	
Nood Primer	D40	1/4	60 mesh (black)	515	414	Carbon filter	
Solventborne topcoats							
usta-Glo	D33	1/4	100 mesh (blue)	413	412	Carbon filter	
Qristal Clear Polyurethane	D52	1/4	60 mesh (black)	413	412	Carbon filter	
Super Gloss	D32	1/4	100 mesh (blue)	413	412	Carbon filter	