

# SIMMONS

excellence in epoxy resin worksurfaces





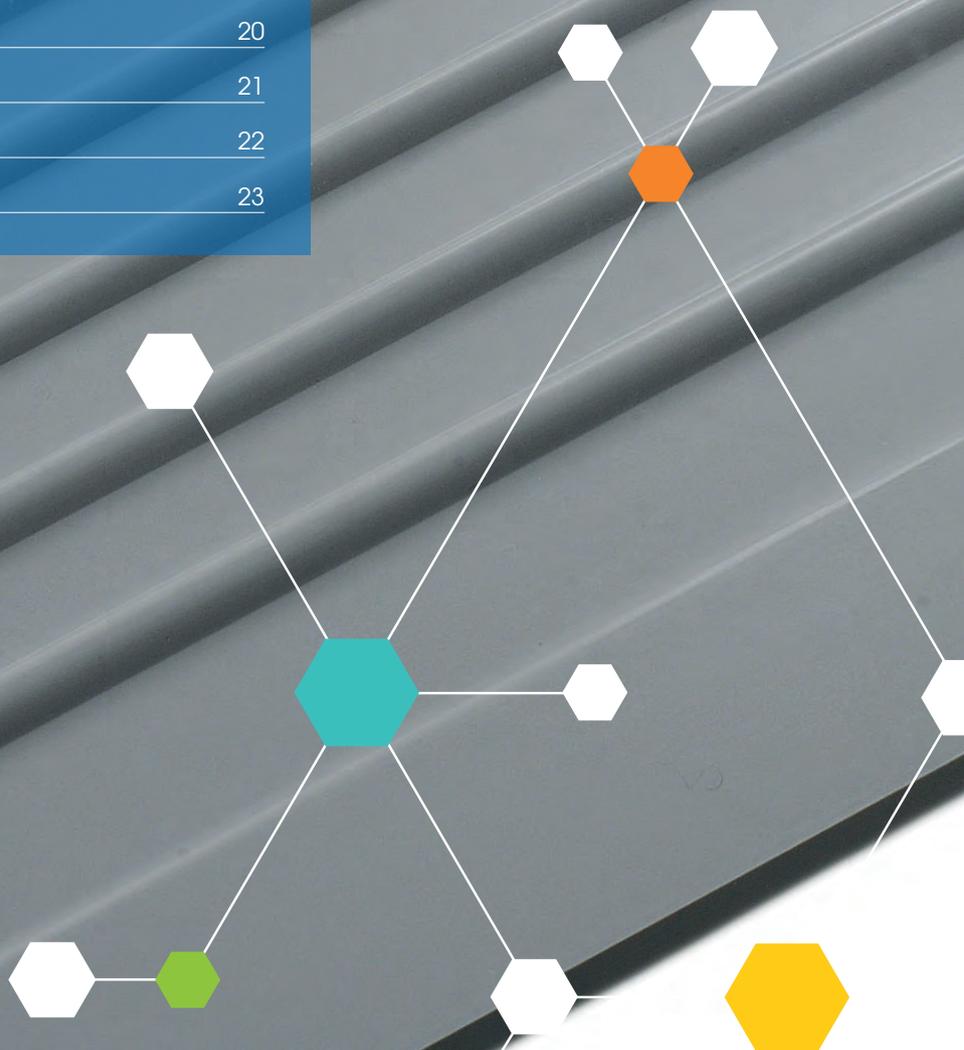
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## Introduction

Epoxy resin is the modern laboratory worktop material that offers a superb combination of features and benefits. It is durable, extremely chemical and stain resistant, mechanically strong, easily cleaned and decontaminated and exhibits good fire resistance, fire propagation and low smoke properties. Components are moulded in a formulated epoxy resin material which has the same chemical properties throughout its entire thickness.

The resin system and all of our moulds are manufactured in-house to ensure that we have total control over the production process from start to finish.

*Organisations throughout the world turn to Simmons to provide a reliable solution to their worktop and sinktop needs. Laboratories in well over 50 countries now rely on Simmons for dependable performance, year after year.*

### Worktops

- Worktops are supplied at a nominal thickness of 15mm to provide good mechanical strength whilst remaining manageable when handling during site fitment.
- Worktops are supplied in sections up to 3 metres long to minimise the need for joints.
- Where joints are required, worktops are supplied with a tongue-and-groove system (including all jointing materials) to ensure tight, level site joints.
- All joints are made with a colour matched chemically resistant epoxy resin grout/adhesive.

### Edgings (Lippings)

- Worktops can be fitted with a number of colour matched epoxy resin edging profiles to provide containment of spillages.
- All edgings can also be supplied loose for fitment to other materials

### Sinks

- Sinks are manufactured from the same material as the worktop, formed in one piece in a range of sizes.
- Sinks are produced in different fitment types for installation into worktops of all materials as well as Simmons' epoxy resin worktops.
- All Simmons sinks have an integral flange to provide easy site fitment whether fitted from above or below a worktop.

### Sinktops

- Simmons offer a range of sinktops in various sizes and configurations. Fully moulded sinktops have integral sinks and drainers providing seamless performance. Sinktops can also be fabricated to suit a non-standard size or configuration.

### Fume Cupboard Bases

- Simmons offer a comprehensive range of one piece fume cupboard bases with a minimum 10mm dishing to contain spills.
- For particularly hostile fume cupboard environments, Simmons also offer 6mm lining panels and baffles for fume cupboard walls. These can be factory assembled with a base by Simmons to create an entire chamber in epoxy resin.

Whilst this information was comprehensive at the time of publication, it should be noted that Simmons are constantly updating and adding to the range of components available. As such we may have made alterations to existing components or introduced new components or systems. Simmons reserve the right to alter specifications without prior notice.

# Client list

AkzoNobel  
Astra Zeneca  
Aughinish Alumina Ltd. - Ireland  
B.P  
Bass Brewery  
Birmingham University  
BNFL Research  
Boots  
British Aerospace  
British Antarctic Survey  
Castrol  
Central Fisheries Board - Ireland  
Ciba-Gelgy  
Codexis - Hungary  
Corus  
Diamond Light Source  
Dunlop Oil & Marine  
Doping Control Centre - University  
Science Malaysia  
Esso  
Fisons Pharmaceuticals  
Glaxo  
Grace Academy Birmingham  
Greenwich Royal Observatory  
Henkel Loctite - Ireland  
Hong Kong University  
Imperial Cancer Research  
Imperial College - London

Indian Oil Corporation - India  
Jaguar Cars  
James Cook University - Townsville,  
Australia  
John Innes Centre  
Kodak  
Laboratory of the Government Chemist  
L'Oréal - France  
Maersk Panun Building - Copenhagen,  
Denmark  
M.A.F.F.  
Magnox Electric Limited  
Mallinckrodt - Ireland  
KAUST - Saudi Arabia  
Merck Sharp & Dohme  
Merrel Dow  
NAPP Laboratories  
National Tobacco - China  
Nestle Rowntree  
Parc de Recerca Biomèdica de  
Barcelona (PRBB) - Spain  
Penn Pharmaceuticals  
Pepsi Cola Global Concentrates -  
Ireland  
Pfizer  
Pilkington Glass  
Proctor & Gamble  
Rhone-Poulenc Rorer  
Richter Gedeon - Hungary

Rolls Royce Aerospace  
Royal College of Surgeons  
Royal Veterinary College  
Sainsbury Laboratory Cambridge  
Sandoz  
Sanofi-Aventis  
Sasol Technology - South Africa  
Shell UK  
St. Andrew's University  
Technip - Qatar  
Tesco  
Trinity College Dublin - Ireland  
Unilever  
University of Botswana - Botswana  
University College Dublin - Ireland  
University College London  
University of Cambridge  
University of Innsbruck - Austria  
University of Oxford  
University of St. Petersburg - Russia  
Wellcome Foundation  
United Biscuits  
Windsor Castle  
Wyeth  
Yukos Oil Company - Russia



# Laboratory Worktops

Most worktops are fabricated to a customer's own specification and are supplied in an easy to assemble form with the minimum of joints. All assemblies are laid out in our works to ensure dimensional accuracy, matching of components, flatness of joints and overall appearance. This way you can be assured that all items will fit together accurately on site.

Simmons worktops are cast in a nominal thickness of 15 mm and in lengths up to 3000 mm and widths up to 1300 mm. Worktops can be cut with a square edge, have a radius edge machined on to them, or can have an edging profile fitted as detailed on pages 8 & 9.

Worktops are cast in solid homogeneous form and so cannot delaminate and will exhibit the

same excellent chemical resistance throughout their entire thickness. Worktops are mechanically strong and as such do not require any sort of backing material. We recommend continuous supports to the front and rear with cross members spaced at a maximum of 800 mm.



## Edged worktops

For safety purposes a containment edging can be provided to any worktop. This illustration shows a no. 1 front edging fitted onto a worktop. Other edgings or upstands of the customer's choice can also be used. Full details on the range of edgings and upstands available can be found on pages 8 & 9.

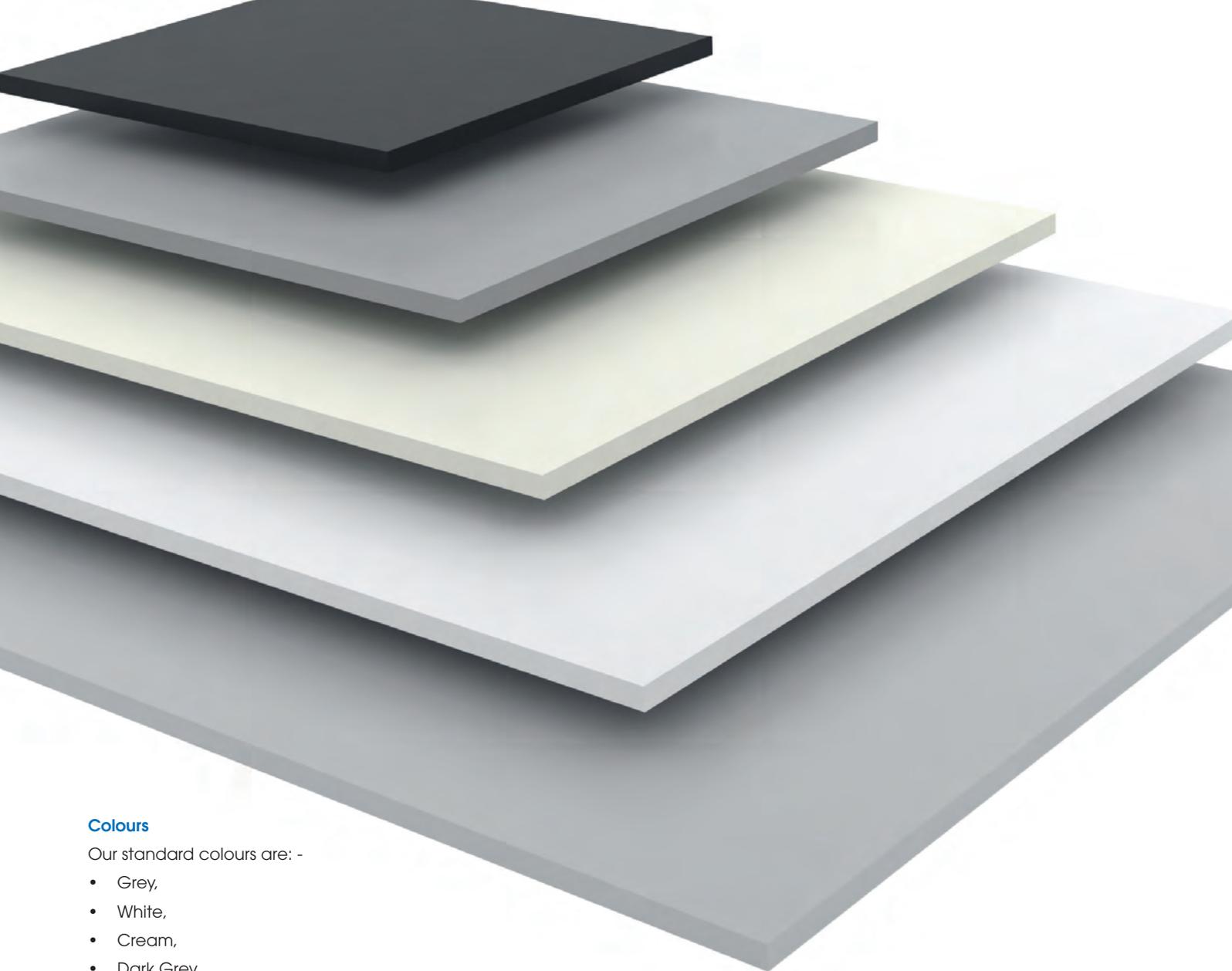
## Standard square edged

Worktops have a very small chamfer to top and bottom edges. Cut edges will be cleaned up but will not have the same gloss finish as the top surface.

## Radius Edged

Where specified, Simmons can supply flat worktops with a radius machined onto the top edge. Machined edges will be cleaned up but will not have the same gloss finish as the top surface.





**Colours**

Our standard colours are: -

- Grey,
- White,
- Cream,
- Dark Grey,
- Black,

(please note the image shown above is only a representation of the range of colours available).

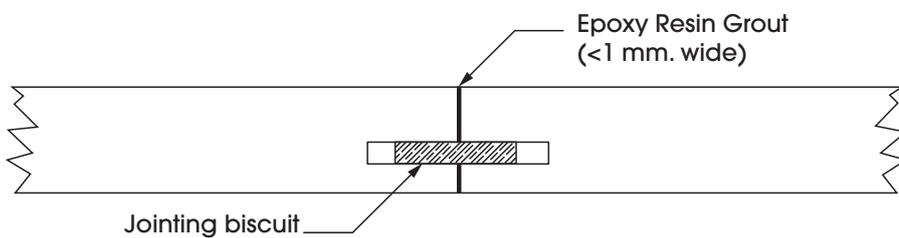
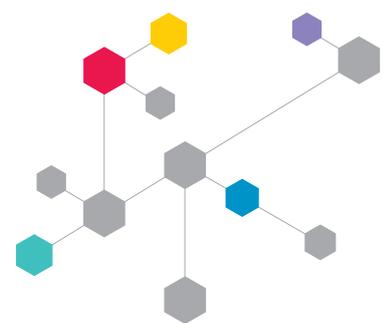
**Joining Worktops**

Where it is necessary to have a joint in a worktop Simmons will provide a biscuited (tongue-and-groove) joint to ensure that the top surfaces are level.

A series of slots are made along the edges to be joined, accurately located at a set distance from the top surface of the worktop. Small "biscuits" are supplied which are inserted into the

slots. The joint is then bonded with epoxy resin grout to give a strong, water tight and chemically resistant seal. Biscuits and grout are supplied with the tops together with full fitting instructions. Joints should be less than 1mm wide for greatest strength and appearance.

The narrowest joint is always the strongest joint.



# Edgings and Upstands

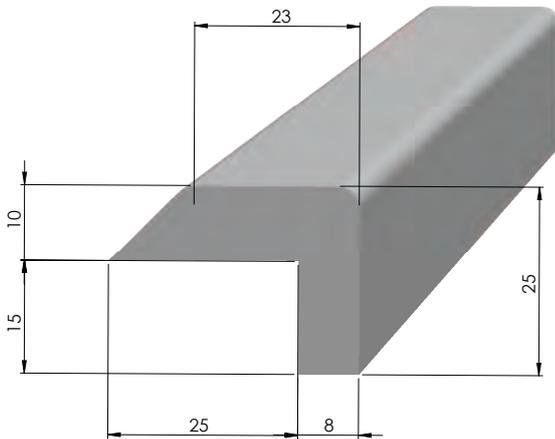
A number of edging profiles can be supplied, either factory fitted to Simmons' epoxy resin worktops or in loose lengths for fitment to other materials. Loose edgings can be supplied pre-cut and mitred at an additional cost.

Epoxy resin grout/adhesive is recommended for fitting all edgings.

## Front edges

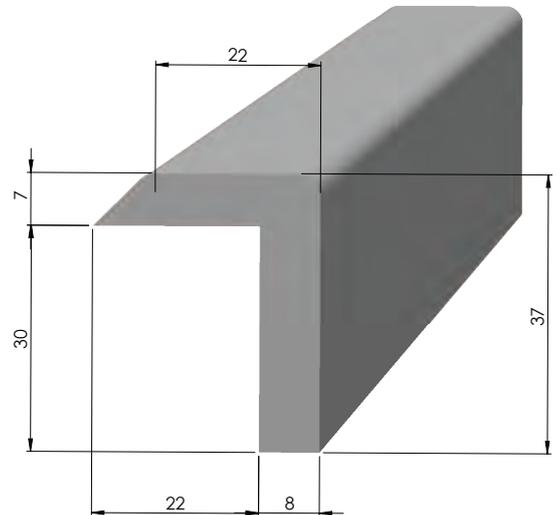
### No.1 (Front edging)

Simmons' standard containment edging for front edges and other seen edges. This edging provides a 10mm dishing and a gloss finish to the outside face. Maximum Length: 3m



### No.1G (Front edging - DIN)

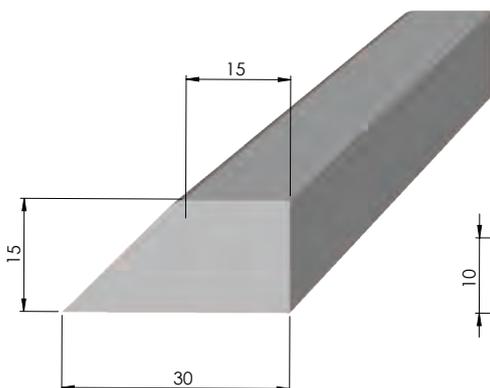
A deep front edging with a 7mm dishing, based on the DIN standard for laboratory worktop containment edges. The 37mm depth can be reduced to accommodate other worktop thicknesses. Maximum Length: 3m



## Rear edges

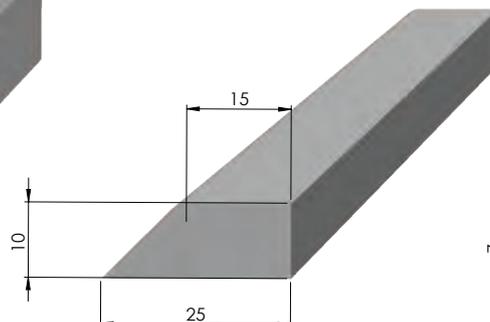
### No.2 (Rear edging)

A 15mm high edging, often used in the fabrication of fume cupboard bases. Maximum Length: 3m



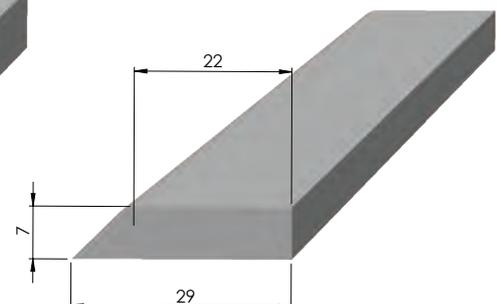
### No.3 (Rear edging)

A 10mm high edging for use against walls or around fume cupboard bases. Designed for use in conjunction with no.1 front edging. Maximum Length: 3m



### No.3G (Rear edging)

A 7mm high edging used against walls or around fume cupboard bases. Designed for use in conjunction with no.1G front edging. Maximum Length: 3m

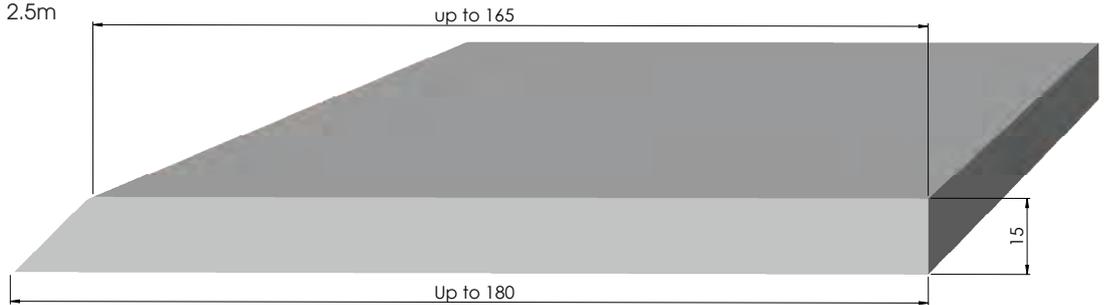




## Wide rear edges

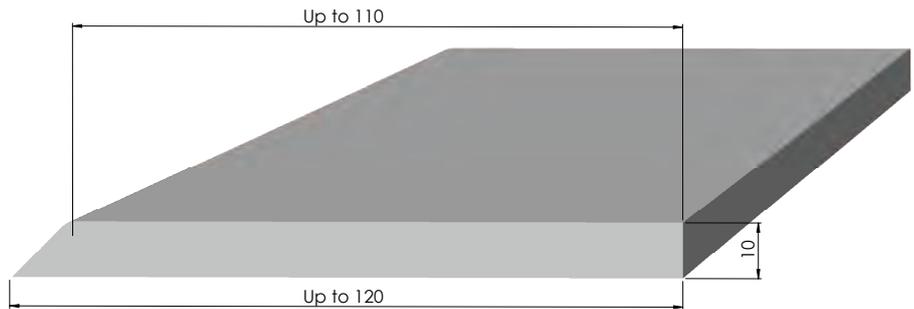
### No.4 (Wide Rear Edging)

A 15mm high edging available in widths up to 165mm. Maximum Length: 2.5m



### No.4A (Wide Rear Edging)

A 10mm high edging available in widths up to 110mm. Maximum Length: 2.5m

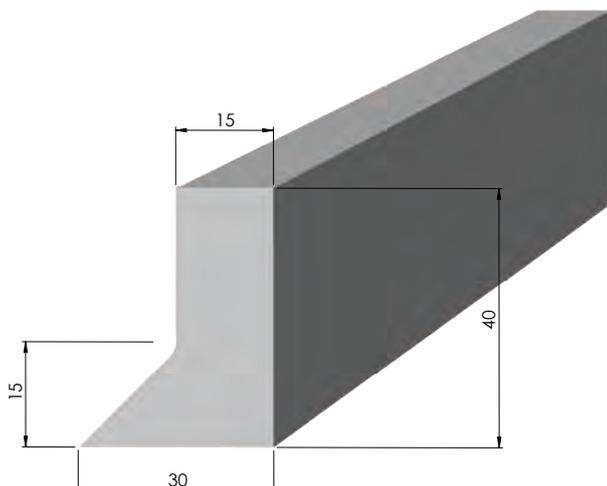


Available up to 2.5m Long

## Upstands

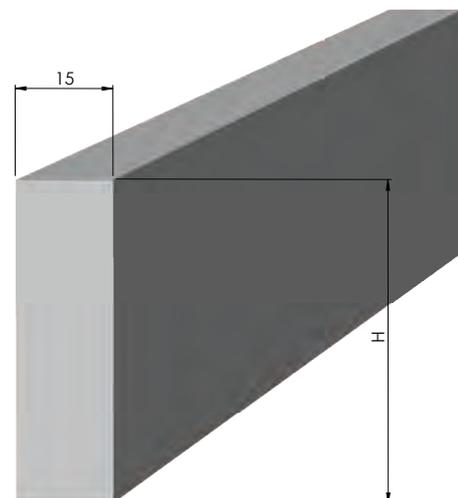
### No.5 (Rear upstand)

With a total height of 40mm and a 15mm bevelled section, this upstand is usually used against walls. Maximum Length: 3m



### No.6 (Plain upstand)

Supplied loose with epoxy adhesive for onsite fitment. Plain upstand is usually used against walls and is available at any required height - H, commonly 50mm or 100mm. Maximum Length: 3m



# Sinks general

Simmons cast a wide range of epoxy resin sinks which can be fitted to a worktop in a number of different ways. All sinks have an integral flange to allow easy fitment whether fitted from above or below a worktop. Sinks are cast in the same epoxy resin material that is used to cast our worktops and will have the same chemical resistance.

They are available in all of our standard colours. All sinks are designed to accept a 73 mm flange waste with a 1 1/2 inch BSP connection which can also be supplied in grey, white or black if requested.

Sinks can be used in following methods of fitment :-

## Overhang / Undermount fitment

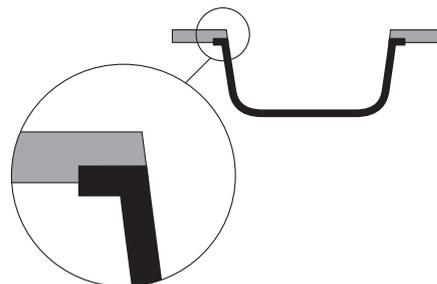
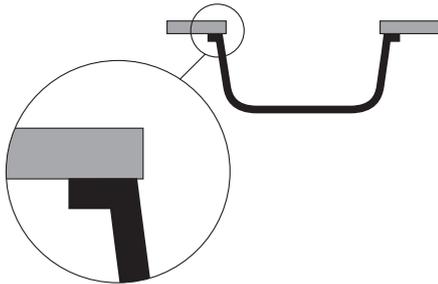
This is the simplest type of sink fitment whereby the sink is simply bonded and screwed to the underside of the worktop. The cut out in the worktop is slightly smaller than the internal size of the sink. Some of the larger sinks will require additional support due to the weight of water that they could contain.

See pages 11 & 12 for details.

## Flush fitment

A unique combination of fitment and machining that results in a completely smooth, crevice-free joint between the sink and the worktop. This special type of fitment is for use in areas where cleanliness and ease of decontamination are important.

This is a type of fitment which is only possible when a sink is being fitted in Simmons' factory into one of our own epoxy resin worktops. Some of the larger sinks will require additional support due to the weight of water that they could contain. See pages 11 & 12 for details.



## Drop-in fitment

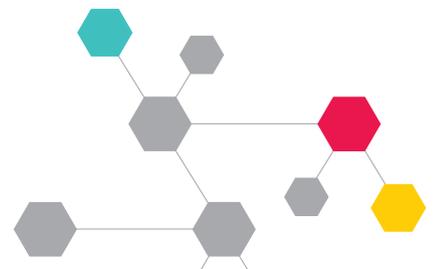
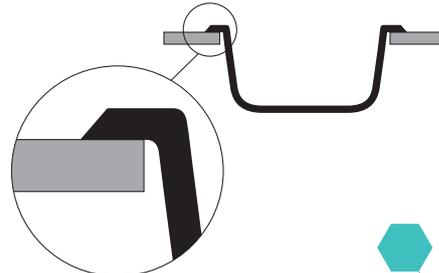
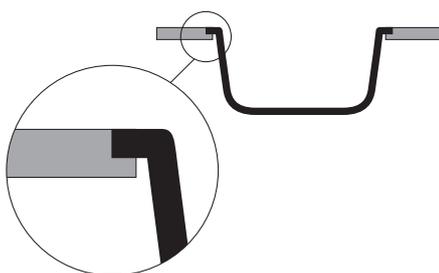
Drop-in sinks are designed to be easily fitted to any type of worktop material. The outside edge of the flange is finished square so that it can be fitted into a rebated cut out in a worktop. It can then sit flush with, or slightly below, the surface of the worktop. The sink is self-supporting on the integral flange. No additional support is required. These sinks are particularly suitable for use with laminate worktops as the core material is covered by the flange of the epoxy resin sink.

See pages 11 & 13 for details.

## Drop-on fitment

Drop-on sinks are designed to be easily fitted to any type of worktop material. They have self-rimming flanges with a smooth finish which sit on the surface of the worktop. By using these sinks the core layer of a laminated worktop will be hidden. The sink is self-supporting on an integral flange. No additional support is required. The same raised flange helps to prevent accidental spillage of liquids into the sink.

See page 13 for details.



## Sinks - A-Range (overhang, drop-in and flush fit)

The A-Range is our latest range of moulded epoxy resin sinks which offers our most versatile solution for the efficient stocking and fitting of laboratory sinks. This range of sinks is designed so that the same sink can be fitted into a rebated cut out for drop-in fitment or screwed and bonded to the underside of the worktop for undermounting. It can also be factory fitted to a flush fit condition.

All of the sinks in this range have the waste outlet located unobtrusively to the rear right hand corner. Sinks are moulded with a smooth, hardwearing and easy to clean and decontaminate surface to the inside and to the top of the flange. They are light and easy to handle.



Sink Ref.	Internal Size	Flange Thickness	Weight
<b>The A-Range</b>			
<b>SDS5-DIA</b>	300 x 200 x 200 mm	7 mm	4 Kg
<b>SQ6-DIA</b>	300 x 300 x 200 mm	7 mm	5 Kg
<b>SA5-DIA</b>	356 x 254 x 152 mm	7 mm	4 Kg
<b>SN9-DIA</b>	406 x 305 x 203 mm	7 mm	6 Kg
<b>SM8 (W)-DIA</b>	450 x 365 x 130 mm	7 mm	5 Kg
<b>SM8-DIA</b>	450 x 365 x 200 mm	7 mm	7 Kg
<b>SM8(X)-DIA</b>	450 x 365 x 280 mm	7 mm	8 Kg
<b>SEL16-DIA</b>	600 x 450 x 300 mm	7 mm	12 Kg
<b>SPL14-DIA</b>	610 x 406 x 203 mm	7 mm	10 Kg
<b>SPL14(XD)-DIA</b>	610 x 406 x 400 mm	7 mm	15 Kg
<b>SVL15(W)-DIA</b>	635 x 381 x 130 mm	7 mm	8 Kg
<b>SVL15-DIA</b>	635 x 381 x 254 mm	7 mm	11 Kg
<b>SFL18-DIA</b>	711 x 381 x 300 mm	7 mm	13 Kg



### Wastes and overflows

Sinks can be supplied complete with a chemically resistant polypropylene waste in grey, white or black if required. Wastes have a 73 mm diameter flange and a 1½ inch BSP tail and will connect to the relevant Vulcathene industrial waste components. These can also be combined with a standing waste tube or an overflow kit.



## Sinks - Overhang (Undermount) & Flush Fit

Simmons' standard range of sinks and troughs are moulded complete with a fixing flange in order to simplify fitment and to optimise the integrity of the joint with the worktop.

With Overhang fitment (also known as Undermount) sinks are simply bonded and screwed to the underside of the worktop through holes drilled in the flange.

If sinks are supplied loose then flanges can be pre-drilled with fixing holes as requested (at additional cost).

Where sinks are factory fitted to Simmons' own worktops they can be provided to either an Overhang or a Flush fitment. Flush fitment involves

rebating the sink into the underside of the worktop and then machining the top to give a smooth, crevice free joint. This can only be done in Simmons' factory when fitting to a Simmons' worktop.

If sinks are supplied loose then they should only be used for overhang fitment. Sinks are moulded with a smooth, hardwearing and easy to clean and decontaminate inside surface. They are light and easy to handle.



Sink Ref.	Internal Size	Flange Thickness	Weight
SES2	160 x 160 x 150 mm	10 mm	2 Kg
SVS3	250 x 200 x 150 mm	12 mm	3 Kg
SDS5	300 x 200 x 200 mm	10 mm	4 Kg
SQ6	300 x 300 x 200 mm	10 mm	5 Kg
SS7	350 x 300 x 150 mm	10 mm	4 Kg
SS6	350 x 300 x 200 mm	10 mm	5 Kg
SKL7	380 x 350 x 200 mm	10 mm	8 Kg
SN9	400 x 300 x 200 mm	10 mm	6 Kg
SGL10	400 x 400 x 300 mm	7 mm	9 Kg
SM8	450 x 365 x 200 mm	10 mm	7 Kg
SGR11	500 x 395 x 300 mm	10 mm	10 Kg
SR12	550 x 365 x 250 mm	10 mm	10 Kg
SPL14(X)	610 x 406 x 300 mm	9 mm	14 Kg

### Please note :

Many sinks on this page have the same or similar internal dimensions to the A-Range of sinks detailed on page 11. The main differences concern the flange size and shape and the waste outlet position.

**Whenever possible we will supply the A-Range sinks but if you specifically require us to supply one of the older style sinks on this page then please clearly state this on any order.**





## Sinks - Drop-in

Drop-in sinks are designed to be easily fitted to any type of worktop material. The outside edge of the flange is finished square so that it can be fitted into a rebated cut out in a worktop. The top face of the flange is finished completely smooth. It can then be fitted flush with, or set slightly below, the surface of the worktop.

The sink is self-supporting on this integral flange. No additional support is required.

These sinks are particularly suitable for use with laminate worktops as the core material of the laminate is covered by the flange of the epoxy resin sink. Sinks are moulded with a smooth, hardwearing and easy to clean and decontaminate inside surface. They are light and easy to handle.



Sink Ref.	Internal Size	Flange Thickness	Weight
<b>SGS2-DI</b>	260 x 110 x 150 mm.	7 mm	2 Kg
<b>SS6-DI</b>	350 x 300 x 200 mm.	9 mm	5 Kg
<b>SGL10-DI</b>	400 x 400 x 300 mm.	7 mm	9 Kg
<b>SGR11-DI</b>	500 x 400 x 300 mm.	10 mm	10 Kg
<b>SR12-DI</b>	550 x 365 x 250 mm.	10 mm	10 Kg
<b>SPL14(X)-DI</b>	610 x 406 x 300 mm.	9mm	14 Kg

## Sinks - Drop-on

Drop-on sinks are designed to be easily fitted to any type of worktop material. They have self-rimming flanges with a smooth finish which sit on the surface of the worktop. By using these sinks the core layer of a laminated worktop will be hidden.

The sink is self-supporting on an integral flange as shown right. No additional support is required. The same raised flange helps to prevent accidental spillage of materials into the sink.



Sink Ref.	Internal Size	Flange Thickness	Weight
<b>SGS2-DO</b>	260 x 110 x 150 mm	7 mm	2 Kg
<b>SDS5-DO</b>	300 x 200 x 200 mm	9 mm	4 Kg
<b>SS6-DO</b>	350 x 300 x 200 mm	9 mm	5 Kg
<b>SGL10-DO</b>	400 x 400 x 300 mm	7 mm	9 Kg
<b>SM8-DO</b>	450 x 365 x 200 mm	9 mm	7 Kg
<b>SEL16-DO</b>	600 x 450 x 300 mm	9 mm	12 Kg

# Special sinks and troughs

## Hexagonal sink

A six sided sink that is designed specifically for the school laboratory so that up to six students can each have easy access to the sink. This can be fitted as an undermount or a drop-in fitment into a worktop of any material. It can also be fitted flush into a Simmons worktop.

## Troughs

A number of troughs are available at the sizes as detailed in the table below. These are commonly used at the rear of fume cupboard bases, especially in water wash cupboards. They are also used for mounting into worktops.

## Circular sinks

Two sizes and configurations of circular sink are produced. The C-40 sink (as shown below mounted into a washroom worktop) is 400 mm  $\varnothing$  x 188 mm deep. It is hemispherical in design for an especially attractive appearance. This sink can also be used as a drop-on or drop-in type fitment. The SC8-C sink is a small circular sink 300 mm  $\varnothing$  x 150 mm deep with steep sides. This sink can also be used for undermount or drop-in type fitments.



Sink Ref.	Type	Fitment type(S)	Internal Size	Flange Thickness	Weight
STB9	Trough	Overhang	500 x 200 x 150 mm	9 mm	7 Kg
STM13	Trough	Overhang	1500 x 150 x 100 mm	11 mm	12 Kg
STL15	Trough	Overhang	<2400 x 150 x 35 mm	10 mm	20 Kg
STX48	Sink	Overhang	1440 x 495 x 390 mm	11 mm	48 Kg
C40-DO	Circular Sink	Drop-on	400 $\varnothing$ x 188 mm	8 mm	6 Kg
SC8-C	Circular Sink	Overhang & Drop in	300 $\varnothing$ x 150 mm	7 mm	6 Kg
SH20-DI	Hexagonal Sink	Overhang & Drop in	679 x 779 x 180 mm	7 mm	14 Kg

# Moulded single drainer sinktops

These sinktops feature a worktop, sink and sloping drainer moulded as a single seamless section.

Sinktops from this range incorporate a ribbed drainer area which slopes to an integrally moulded sink bowl. The units are cast oversize and then cut to the required size and configuration, from a minimum of 900 x 600 mm up to a maximum of 1500 x 900 mm and at any

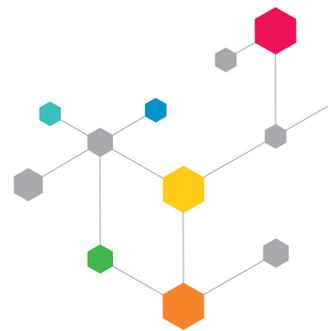
size in between. They are then fitted with edging from Simmons' range as required.

Sinktops can be fitted directly onto steel supports or cabinets. There is no need to provide any additional support for these units.

When ordering please clearly state overall size of unit, left or right hand bowl and preferred position of sink

within the unit. Any tap holes that are required should also be specified.

Two of these units can be combined to make up a double bowl double drainer sinktop. These would have a central joint machined ready to be jointed on site and would have edging all around the perimeter of the assembly. All jointing materials would be supplied as part of the package.



Sinktop Ref.	Length	Width	Bowl Size
<b>SD900</b>	900 mm.	600 to 850 mm	400 x 400 x 300 mm
<b>SD1000</b>	901 to 1000 mm	600 to 850 mm	400 x 400 x 300 mm
<b>SD1200</b>	1001 to 1200 mm	600 to 850 mm	400 x 400 x 300 mm
<b>SD1400</b>	1201 to 1400 mm	600 to 850 mm	400 x 400 x 300 mm
<b>SD1500</b>	1401 to 1500 mm	600 to 850 mm	400 x 400 x 300 mm

### Please note :

Single drainer sinktops can be provided at any length from 900 mm up to 1500 mm and any width from 600 up to 850 mm.

- All dimensions in millimetres.
- Simmons sinktops are designed to accept a sink waste (73mm flange, 1½" BSP).

## Moulded double drainer sinktops

These sinktops are moulded as homogeneous items and as such are totally seamless. Sinktops include an integrally moulded central sink bowl, sloping drainers to both sides and moulded edging. A flat area is provided to the rear of the sink on which to mount any taps required. It is possible to cut and re-edge the sink-units to give a reduced width.

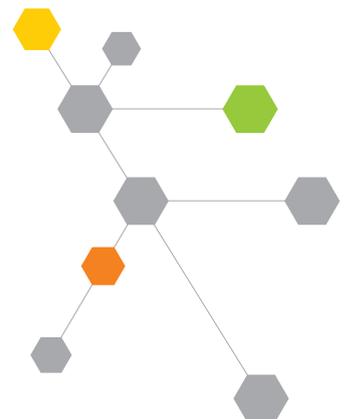
All of these sink-units have raised drainer rails. Please note that the design of each unit is slightly different.

Detailed drawings can be supplied on request.

Sinktops can be mounted directly onto steel supports or whatever furniture is being used. We would recommend full peripheral support with the addition of supports either side of the bowl.



Sinktop Ref.	Length	Max. Width	Bowl Size	Weight
DD1350	1350 mm	760 mm	600 x 450 x 250 mm	30 Kg
DD1500	1500 mm	750 mm	450 x 365 x 200 mm	30 Kg
DD1500(F)	1500 mm	650 mm	450 x 365 x 200 mm	28 Kg
DD1500(X)	1500 mm	750 mm	600 x 450 x 250 mm	35 Kg
DD1650(F)	1650 mm	650 mm	635 x 370 x 270 mm	35 Kg



## Fabricated sinktops

If standard moulded single or double drainer sinktops are not suitable then we can fabricate sinktops to other sizes and configurations to suit your requirement. Using 15 mm thick sheet and combining it with various sinks from our standard range, drainer types (moulded drainers, drainer board or machined drainer grooves) and

edgings or upstands we should be able to fabricate whatever sinktops you may need.

Please submit a drawing of the sinktop that you require and we will advise how close to that specification we are able to get.



# Drainers and drip cups

## Drop-in and Drop-on sink and drainers.

Simmons offer 2 types of simple sink and drainer for fitment to other materials. These can be used to easily and inexpensively create a self-contained wet area of high chemical resistance.

The SD15-DI drop-in sink and drainer unit is designed to be fitted into a rebated cut out in the worktop. The surface should be flush with or set slightly below the worktop so that liquids can be washed into the bowl.

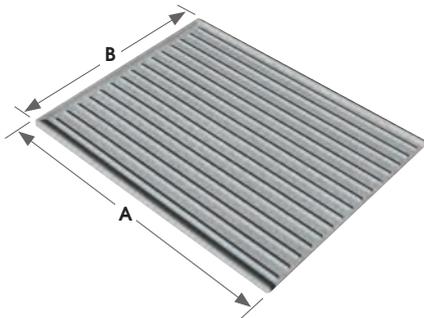
Sinktop size : 860 x 345 mm.

Bowl size : 406 x 305 x 203 mm.

The SD915-DO drop-on sink and drainer unit is designed to be surface mounted onto a worktop. It includes a dishing all round to contain spills.

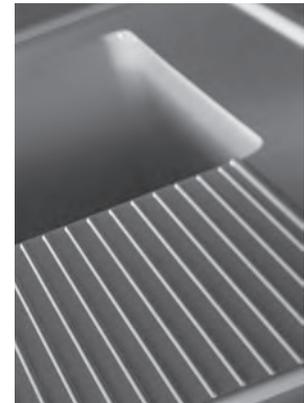
Sinktop size : 915 x 415 mm.

Bowl size : 400 x 300 x 200 mm.



## Drainer boards

Drainer boards are thin section epoxy resin trays which are sloped to provide drainage to a sink. The surface of the drainer board is ribbed so as to match the profile of the drainers found on all of Simmons' standard moulded sink and drainer units. Boards are supplied in 2 sizes as shown to the left.



Drainer board	Length A	Width B
Medium	425 mm	325 mm
Large	450 mm	400 mm



## Drip-cups

These drip-cups comprise an epoxy resin cup section into which a waste is fitted in order to provide a 1½ inch B.S.P threaded tail pipe. Wastes are included with the drip cup. Drip-cups can be bonded in with silicone sealant or epoxy resin grout.

Drip Cup.	Shape	Internal Size
<b>S501</b>	Circular	80Ø x 65 mm
<b>S500</b>	Circular	137Ø x 75 mm
<b>S497</b>	Oval	150 x 70 x 110 mm
<b>S499</b>	Oval	229 x 76 x 110 mm
<b>S1000</b>	Oval	250 x 125 x 150 mm

# Moulded fume cupboard bases

Epoxy resin is an excellent material for fume cupboard bases. Outstanding chemical resistance and mechanical strength enable it to withstand the harsh environments encountered in fume cupboards.

Bases can be supplied from our extensive range of moulded sizes or fabricated to any non-standard size or configuration. In this way they may be tailored to suit individual requirements and applications using any of Simmons' comprehensive range of sinks, drip cups and troughs.

## Standard Bases

One piece moulded bases are available in a range of common sizes which are shown in the table below.

The width of these bases may be cut down to suit individual requirements.

We also have moulds available for many other sizes of fume cupboard base. Please enquire about other sizes that you may require.



Base Ref.	Length	Width
<b>B900</b>	884 to 900	645 to 800 mm
<b>B1200</b>	1184 to 1200	645 to 800 mm
<b>B1500</b>	1484 to 1500	645 to 800 mm
<b>B1700</b>	1684 to 1700	645 to 800 mm
<b>B945</b>	945 to 995	655 to 800 mm
<b>B1245</b>	1215 to 1245	655 to 800 mm
<b>B1545</b>	1415 to 1545	655 to 800 mm
<b>B1745</b>	1734 to 1745	670 to 780 mm

## Please note :

Many other sizes are also available.

## Fabricated fume cupboard bases

For sizes or configurations that cannot be produced by using our standard range of bases we can fabricate bases using 15 mm sheet and any of Simmons' range of edgings. In this way a base can be made to almost any size up to 3000 mm long and approx. 1300 mm wide, with any width or configuration of edging.

The photo below shows a fabricated base with wide edging to both sides through which the services will be mounted. Other bases can have shaped edging to fit around sinks or drip cups. Flush fitting lids can also be provided to cover any cut outs in the base.



## Fume cupboard liners

In hostile fume cupboard environments the walls, roof and baffles may come under chemical attack, especially where chemicals at high temperatures will give off vapour. Simmons can provide lining panels made from solid 6 mm thick epoxy resin sheet to provide the necessary resilience.

Linings can be supplied as suitably shaped individual flat panels with appropriate cutouts and fixing mounts. Alternatively Simmons can supply an assembled chamber constructed around a standard base with coved, or 45°, corners.

# Material specification

## Thermal Properties

Thermal Shock	2000 cycles (90 sec. at 75 °C, 90 sec. dwell, 90 sec. at 15°C) No effect
Smoke Emission	Should not be used with dry-ice or liquid nitrogen. Low Smoke Emission – BS 6853 1999 App. D Clause d.8.4 Result – Ao(on) 8.75, Ao(off) 10.41
Flammability	Class 0
Thermal Decomposition	350° C
Glass transition temperature (Tg)	120 - 130 °C

## Mechanical Properties

Tensile strength	85 N/mm <sup>2</sup>
Tensile Modulus	10,500 N/mm <sup>2</sup>
Elongation at break	0.8%
Flexural strength	112 N/mm <sup>2</sup>
Flexural Modulus	10,000 N/mm <sup>2</sup>
Compressive Strength	190 N/mm <sup>2</sup>
Coefficient of linear thermal expansion	34 x 10 <sup>-6</sup>
Water absorption - 24 hours at 23°C	5-10 mg (0.06-0.068%) ISO 62 (1980)

## Radioactive Decontamination

	BS 4247 Part 1 Test A
Decontamination factor (geometric mean)	5598.0
Deviation factor	1.25
Ease of radioactive decontamination classification	"Excellent"

## Chemical Resistance (24 hour spot test. Based on BS EN 438-2:1991)

Acetone	Unaffected	Hydrogen Peroxide	Unaffected
Acetonitrile	Unaffected	Methanol	Unaffected
Ammonium Hydroxide 28%	Unaffected	Methanol	Unaffected
Aqua regia	Unaffected	Nitric acid 70%	Very slight bleaching
Benzyl alcohol	Unaffected	Nitric acid - concentrated	Slight yellowing
Chloroform	Unaffected	Nitric acid - fuming	Attack and staining
Chloroform - 100%	Unaffected	Perchloric acid - 0.1N	Unaffected
Chromic acid pickle (*1)	Unaffected	Phosphoric acid - concentrated	Unaffected
Dichloromethane	Surface attack	Potassium hydroxide pellet (*2)	Unaffected
Dimethylformamide	Unaffected	Sodium hydroxide - 50%	Unaffected
Ethyl acetate	Unaffected	Sodium hydroxide pellet (*2)	Unaffected
Formaldehyde 37%	Unaffected	Sodium hypochlorite	Unaffected
Hydrochloric acid - 30%	Unaffected	Sulphuric acid - 70%	Unaffected
Hydrochloric acid - concentrated	Unaffected	Sulphuric acid - concentrated	Surface attack
Hydrofluoric acid - 40%	Slight bleaching	Xylene	Unaffected

- \*1 - 72g/l chromium trioxide + 360g/l sulphuric acid
- \*2 - Changes to concentrated solution, then partly carbonates.
- Simmons may alter the specification of epoxy resin systems without notification

# Installation and Maintenance

## Storage of Tops and Bases.

All tops and bases should be stored flat. Under no circumstances should components be stored leaning against a wall as this can cause bowing.

Corner protectors are provided to protect tops during transportation and handling. If components are to be stored for any period of time the corner protectors should be removed.

## Worktop Supports.

Simmons recommend that continuous rails be provided to the front and rear of worktops. If a section is to be unsupported the span should not exceed 800 mm.

Fume cupboard bases should have continuous support to the perimeter. Any bases longer than 900 mm should also have central supports.

## Epoxy Resin Grout.

Grout is supplied as a pack of two components :- resin and hardener. Once mixed the grout has a workable life of approximately 5 minutes. It is therefore essential that only a manageable amount of grout is mixed at one time, and that all preparatory work is done before mixing.

The resin and hardener should be measured out at the ratio stated on the containers onto a mixing board. When ready for use this should be thoroughly mixed using the wooden sticks provided until the two components are homogeneous.

Please note that a minimum room temperature of 5°C is required to initiate the cure cycle for the grout. The useable life of the grout will vary with the ambient temperature. The warmer the room the quicker the reaction.

It is recommended that Latex gloves are worn whilst using epoxy resin grout components and cellulose thinners.

## Drilling and Cutting.

Small holes can be drilled in Simmons' epoxy resin tops using masonry or tungsten carbide tipped drills. Larger holes will require the use of diamond plated holesaws.

Small cuts can be made using diamond plated jigsaw blades (which can be purchased from Simmons if necessary). If more substantial amounts of cutting, or cuts with a cosmetic finish are needed, the tops should be returned to Simmons for factory cutting.

## Jointing Tops.

List of Tools and Equipment required:-

- Cellulose Thinners
- G-Clamps
- Clean Cloths / Wipes
- Levelling Blocks
- Vinyl Tape
- Sharp Flat Chisel
- Long Sash-Clamps
- Steel Rule
- Latex Gloves

All joints are machined for a biscuited joint. All biscuits and grout for making the joint are supplied with the tops.

Joints should always be cleaned and degreased with cellulose thinners before commencing any work. Vinyl tape should

be applied to the top surface adjacent to the joint as close to the edge of the top as possible. The two sections of top should then be carefully lined up and pushed together until there is a gap of approx. 2 - 3 mm.

A mix of grout should then be prepared as described above. When completely mixed this should be applied to the abutting edges of the tops. The tops can then be pulled together with sash-clamps until the grout/joint line is less than 1 mm wide. The narrowest joint is always the strongest joint.

It is recommended that the front edge of the top be carefully levelled off and clamped with levelling blocks and G-clamps either side of the joint. The top must be held together with sash-clamps while the grout goes off. Excess grout squeezed out of the joint should be levelled off to the top of the vinyl tape using a flat / straight edge (e.g. steel rule).

After 5 minutes the vinyl tape can be carefully removed ensuring that the grout in the joint is not damaged. After a further 4 - 5 minutes the grout will become slightly rubbery. The joint should then be wiped down with cellulose thinners with strokes going across the joint (not along it).

## Fitting Edging and Upstand.

List of Tools and Equipment required:-

- 80 Grit Sandpaper
- Cellulose Thinners
- Clean Cloths / Wipes
- G-clamps and protective blocks
- Sharp Flat Chisel
- Latex Gloves

All edging and upstand should initially be dry fitted to check for size and fit.

Minor adjustments can be made using 80 grit sandpaper.

The underside of the edging or upstand and the area onto which it is to be fitted must be rubbed down with sandpaper and then with cellulose thinners.

Both components have a coating of release from the casting procedure which will prevent anything bonding to it unless this coating is removed.

A mix of grout should then be prepared as described above. When completely mixed this should be applied in a thin layer to the underside of the edging/ upstand. The edging should then be placed in position and securely clamped down (using blocks to protect the surface of the edging). This will squeeze out any excess grout which should be removed with a sharp flat chisel when it becomes rubbery. After approximately 10 - 15 minutes when the grout has fully hardened the clamps may be removed.

It is important that a radius fillet of grout is applied to the joint between edging and the worktop so as to ensure that there is an easily cleanable and fully sealed joint. A fresh mix of grout should be prepared as described above.

When completely mixed this should be applied along the joint using the wooden sticks provided. A final run around with the radius end of the stick will give a tidy finish. When the excess grout becomes rubbery it should be very carefully removed using a sharp flat chisel. Approximately 1 hour after this the joint can be wiped down with cellulose thinners.

This radius fillet is not required with flat sheet upstands which meet the top at a 90° angle.

## Fitting Sinks.

List of Tools and Equipment required:-

- Masonry Drills
- Silicone Sealant
- Self-Tapping Screws
- Sharp Flat Chisel
- Screwdriver
- Cellulose Thinners
- Epoxy Resin Grout (if required)
- Clean Cloths / Wipes
- Latex Gloves

Overhang/Underslung sinks which are supplied loose can be fitted to a worktop with a suitably sized cut out (please ring for recommendation if unsure). Clearance holes for self-tapping screws should be drilled through the sink flange with a masonry drill, and the worktop drilled with a pilot hole to accept same. A layer of silicone sealant should be applied to the flange and the sink should be screwed securely into place. Excess silicone should be removed before it cures.

Drop-on sinks should be fitted into a suitable hole (please ring for recommendation if unsure) with a layer of silicone or epoxy under the flange. Excess material should be removed before cured.

With drop-on sinks it is important that a radius fillet of grout is applied to the joint between sink flange and worktop so as to ensure that there is an easily cleanable and fully sealed joint. If using epoxy grout then a fresh mix of grout should be prepared as described above. When completely mixed this should be applied along the joint using the wooden sticks provided. A final run around with the radius end of the stick should give a tidy finish. When the excess grout becomes rubbery it should be very carefully removed using a sharp flat chisel and wiped down with cellulose thinners.

Drop-in sinks should be fitted into an appropriate rebated cut out and bedded into a layer of silicone or epoxy which should then be smoothed off level with the flange. Excess material should be removed before cured as above.

## General Maintenance.

As with all worktops a reasonable standard of laboratory housekeeping will help to keep the worktops in good condition. All spillages should be cleaned up as soon as possible. Staining agents and aggressive chemicals should not be allowed to sit in contact with the tops for a prolonged period of time.

Areas of chemical attack or staining can be removed with a polishing compound or very fine abrasive paper, but it should be stressed that this will alter the finish of the surface. Performance will not be affected.

The use of a wax furniture polish will help to retain the gloss finish.

Components should not be exposed to dry-ice or liquid nitrogen and heat insulation pads should be placed between a top and a steambath or hotplate to prevent thermal stress.

# Simmons' Terms and Conditions of Sale

1. In these conditions the following phrases shall have the following meanings:-

- (a) The Company shall mean Simmons (Mouldings) Limited.
- (b) The Customer shall mean an individual, firm, company or other party with whom the Company contracts.
- (c) "The Supply" shall mean any supply under contract of sale or otherwise.

2. No order placed in pursuance of any quotation shall be binding upon the Company unless such an order is accepted by the Company in writing. Any contract made between the Company and the Customer (hereinafter referred to as the Contract) shall be subject to these conditions.

These terms and conditions shall supersede any and all other terms and conditions in any documentation used by the Customer. No representation made or warranty given by any person acting or purporting to act on behalf of the Company shall have any force or affect whatsoever unless confirmed in writing by a Director of the Company.

A person or company who is not party to the contract has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this contract.

3. Where goods are made to the Customers specification the Customer undertakes full responsibility for the suitability and accuracy of the specification.

If the Customer omits to notify the Company of any special requirements the Customer shall remain liable to the Company for the purchase price and any additional costs incurred in attempting to adapt the goods or otherwise.

4. Whilst the Company shall take all reasonable steps to adhere to any specified delivery date or period in which delivery is to take place, such dates and periods shall be treated as estimates only and the Company will not be liable for failure to deliver by such date or within such period.

5. The Company shall be entitled to defer delivery in any event until any monies owed by the Customer have been paid. Unless otherwise agreed, risk shall pass to the Customer from the date of delivery of the goods by the Company or its agent or carrier to the Customer or its agents. Any return of goods or part thereof from the Customer's premises to the Company's premises shall be at risk of the Customer unless such goods are carried by the Company, its agent or carrier then shall be at the Company's risk.

Where goods are sold FOB or CIF all risk of loss or damage in Transit shall pass to the Customer when goods place on board ship notwithstanding that the property in the goods may not have passed to the Customer and the Company shall be under no obligation to give the Customer notice specified in section 32(3) of the Sales of Goods Act 1893.

6. If no time for delivery is specified the Customer shall be bound to accept the goods when they are ready for delivery. If the Customer is unable to take delivery for whatever reason and in this respect time shall be of the essence of the Contract then the Company shall be entitled to invoice the Customer and arrange suitable storage of the goods in which event the Customer shall pay to the Company such reasonable amount by way of storage charges as the Company may determine.

Should the Company be delayed or prevented from making delivery of the goods due to act of war, Government or Parliamentary restrictions, strike, walkout, fire, floods, explosion, labour disturbance, trade disputes, damage to or destruction of the goods, breakdown of machinery, shortage of labour, raw materials or Act of God, or due to any other cause beyond the reasonable control of the Company, the Company shall be at liberty to cancel or suspend the order made by the Customer without incurring any liability for any loss or damage arising therefrom.

7. Payment

(a) The Company is entitled to raise an invoice for goods delivered to, or stored on behalf of, the Customer.

(b) Unless specified to the contrary, payment shall be made by the end of the month following the month of invoice.

(b) If payment is overdue, the Company reserves the right to charge interest on the price at the rate of one and a half percent per month from the date on which payment becomes due until the date of payment provided always that the payment of such interest shall be in addition to all other rights of the Company.

8. The Company is entitled to invoice for reimbursement of any extra costs incurred by the Company due to suspension or deferment of any order by the Customer or in the event of the Customer's default in collecting or giving instructions for delivery of any goods.

9. The Company may immediately defer or cancel this contract as to any further deliveries (but without prejudice to its rights to the full purchase price for goods delivered and damages for any loss suffered in consequence of such determination) if the Customer fails to comply with any of its obligations hereunder or becomes bankrupt or makes an assignment agreement or composition with its creditors or suffers distress or process of execution to be levied on its property or has a receiver appointed over all or part of its undertaking or assets or goes into liquidation either compulsory or voluntarily (except for the purpose of reconstruction or amalgamation). The Company reserves similar rights of cancellation if it appears probable or likely to the Company that any of the above events will occur.

10. Where the Company has issued an acceptance of order and with the agreement of the Company, the Customer subsequently cancels or postpones its order, the Customer shall compensate the Company to the extent of any costs or charges incurred by reason of such cancellation or postponement, together with all costs incurred by the Company up to the date thereof and in the event of the Company not being able to sell the materials elsewhere at the contract price, the Customer shall be liable to pay the difference. Acceptance of such cancellation will only be binding in writing.

11. Limitation of Liability

Except to the extent that this condition may be rendered void or unenforceable under any enactment, any liability of the Company arising under the contract (excluding liability for the death or personal injury caused by the negligence of the Company or its employees) shall:-

(a) be limited to direct losses suffered by the Customer (except for normal profit) and shall not extend to indirect or consequential losses howsoever arising, and ;-

(b) in respect of each consignment of material delivered hereunder, shall in no circumstances exceed the invoiced value of the consignment plus 10%.

It is a material condition to the Company's liability the Customer shall:-

(c) advise the company of damaged or incomplete deliveries within 2 working days of delivery, and of sub-standard work within 9 working days of delivery

(d) have either returned the goods to the Company or provided authority for the Company's servants or agents to inspect them, all as the Company may request.

(e) When an error or fault is identified the Company shall be entitled to repair or replace goods at no cost to the customer. The Company shall not be liable for any costs of repair or replacement undertaken by the Customer or his agents.

(f) Where the Company agrees to repair or replace goods in accordance with the foregoing provisions of this paragraph any time specified for delivery under the contract shall be suspended for such period as the Company may reasonable request.

12. The following provisions shall apply to all contracts for all goods under the contract which the Company agrees to supply to the Customer:-

(a) Legal title to the goods shall remain with the Company until such time as the company has received payment of the purchase price of the goods and the purchase price of any goods or services previously or subsequently supplied by the Company to the Customer whereupon such title shall pass to the customer.

In default of payment by the Customer when lawfully demanded by the Company, the Company shall be entitled to enter the premises and recover the goods.

(b) The Customer shall maintain a suitable policy of insurance in respect of the goods for full replacement value thereof from the date or dates on which the risk then passes to the Customer.

13. In the event that any clause or any part thereof and/or any provision of these conditions is found invalid, void or unenforceable by any Court or tribunal or competent jurisdiction the remainder of the contract shall remain valid and enforceable according to its terms and conditions (without prejudice to the generality of the forgoing).

14. Failure or delay by the Company in exercising or enforcing any right whatsoever arising under this contract shall not be deemed to be a waiver thereof and shall not prevent the subsequent enforcement of that and all other rights.

15. The proper law of all contracts with the Company shall be English Law which shall govern in all respects the construction and effect of such contract and of these conditions. The Customer agrees that in the event of any dispute arising out of the contract or performance thereof the Customer shall submit to the non-exclusive jurisdiction of the English Courts or such other court as the Company may nominate.

A proven combination that partners the great chemical resistance, strength and durability of TRESPA® TOPLABPLUS® with high quality moulded epoxy resin sinks and marine edgings from SIMMONS. This makes it a great solution for all areas of the laboratory.

## Think Sinks

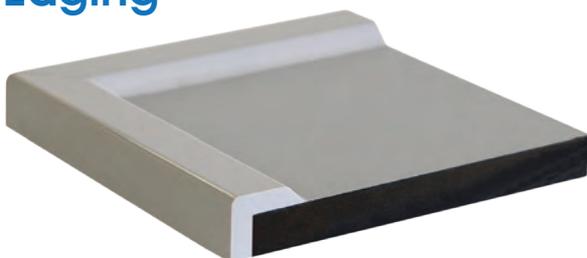
Simmons' color matched epoxy resin sinks have been designed for use in Trespa countertops. They are extremely chemically resistant and durable and have a smooth silk finish to complement the finish of the Trespa top. All waste outlet holes are positioned unobtrusively to the rear right hand corner.

Sink ref.	USA Ref.	Internal size
SDS5-DIA	#3	300 x 200 x 200 mm
SQ6-DIA	#6	300 x 300 x 200 mm
SA5-DIA	#5	356 x 254 x 152 mm
SN9-DIA	#15	406 x 305 x 203 mm
SM8(W)-DIA	#25A	450 x 365 x 130 mm
SM8-DIA	#25	450 x 365 x 200 mm
SM8(X)-DIA	#30	450 x 365 x 280 mm
SEL16-DIA	#52	600 x 450 x 300 mm
SPL14-DIA	#50	610 x 406 x 203 mm
SPL14(XD)-DIA	#70	610 x 406 x 400 mm
SVL15(W)-DIA	#55A	635 x 381 x 130 mm
SVL15-DIA	#55	635 x 381 x 254 mm
SFL18-DIA	#59	711 x 381 x 300 mm
SH20-DI (hexagonal)	#200	680 x 780 x 178 mm

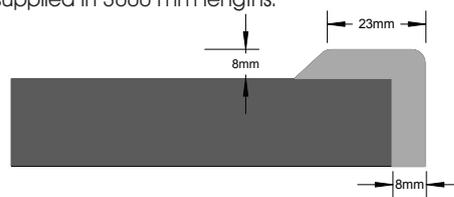


**Please note :**  
Some internal sizes are not exactly the same as the USA sinks.

## Think Edging



Epoxy resin edging can be fitted to Trespa worktops to provide a marine edge for use in wet areas or to increase the level of protection for the user. The overall depth of the edging can be altered to suit any countertop thickness. Edging is supplied in 3000 mm lengths.



## Think Sinktops

These sinktops will easily and inexpensively create a self contained wet area of high chemical resistance in a TRESPA worktop.

The SD15-DI is an epoxy resin sink and drainer unit which is designed to be fitted into a rebated cutout in a worktop so as to finish flush with, or slightly below, the surface.

The SD915-DO is an epoxy resin sink and drainer unit which is designed to be surface mounted on top of a worktop with just the sink bowl dropping through.

Sinktop	Sinktop Size	Sink Size	Fitment type
SD15-DI	860 x 346 mm	406 x 305 x 203 mm	Drop-in
SD915-DO	915 x 415 mm	400 x 300 x 200 mm	Drop-on



**Simmons (Mouldings) Ltd.**

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