



EPOXY RESIN WORK TOP & SINKS

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Introduction

Worktops

- Worktops are supplied at a nominal thickness of 15mm – 19mm to provide good mechanical strength whilst remaining manageable when handling during site fitment.
- Worktops are supplied in sections up to 3 meters long to minimize 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.

Sink-tops

- HERAIS offer a range of sink-tops in various sizes and configuration Fully molded sink-tops have integral sinks and drainers providing seamless performance. Sink-tops can also be fabricated to suit a non-standard size or configuration.

Fume Cupboard Bases

- HERAIS offer a comprehensive range of one piece fume cupboard bases with a minimum 10mm dishing to contain spills.
- For particularly hostile fume cupboard environments, HERAIS 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.

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 our epoxy resin worktops.
- All HERAIS Epoxy Resin sinks have an integral flange to provide easy site fitment whether fitted from above or below a worktop.

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 molded in a formulated epoxy resin material which has the same chemical properties throughout its entire thickness. The resin system and all of our molds are manufactured in-house to ensure that we have total control over the production process from start to finish.

Laboratory Epoxy Resin Work-Top

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.

HERAIS Epoxy Resin worktops are cast in a nominal thickness of 19 mm and in lengths up to 3000 mm and widths up to 1500 mm.

Worktops can be cut with a square edge, have a radius edge machined on to them, or can have an edging profile fitted.

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.



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.



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.



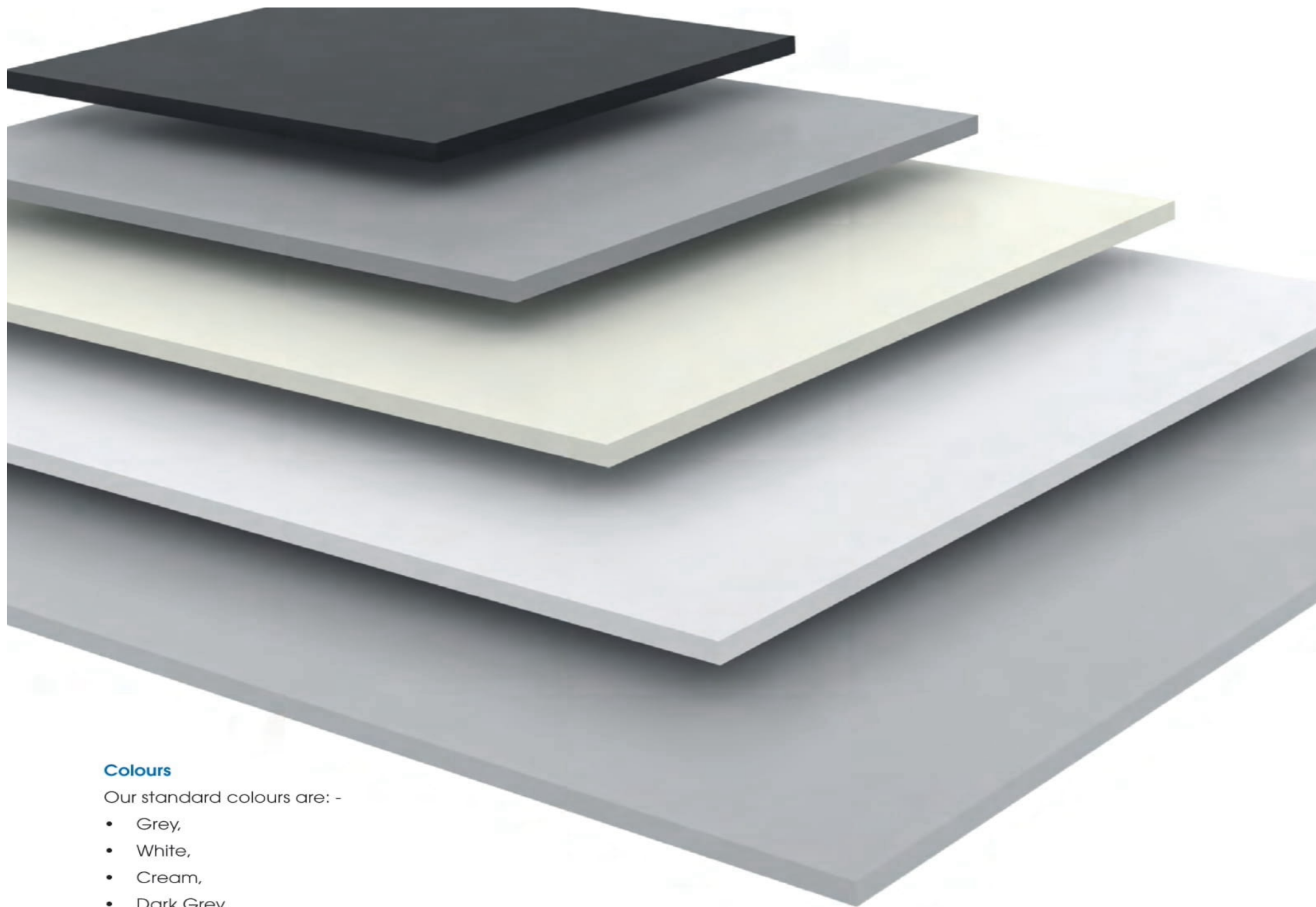
Radius Edged

Where specified, HERAIS 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.

*** Sheet Size: 3650mm X 1530mm**

*** Thickness: 15 mm / 19 mm / 25 mm**

Epoxy Resin Work -Tops Standard Colours

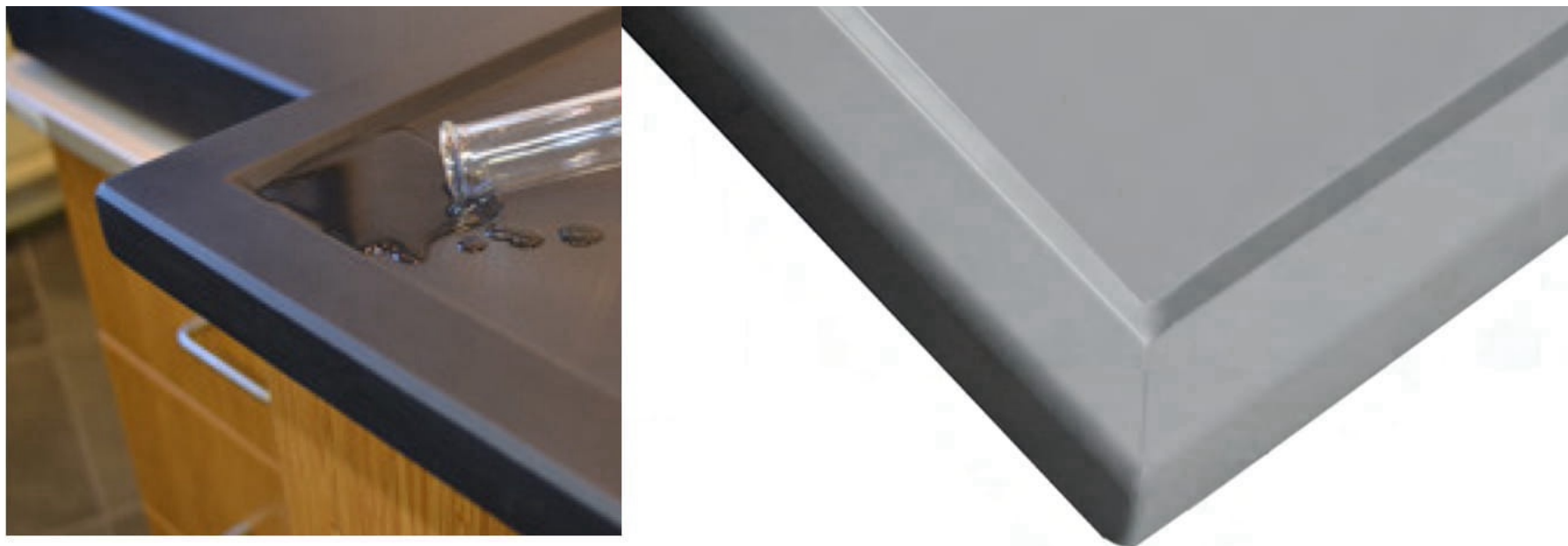


Colours

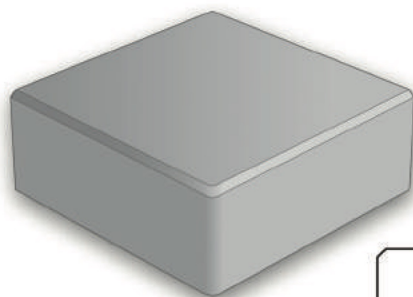
Our standard colours are: -

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

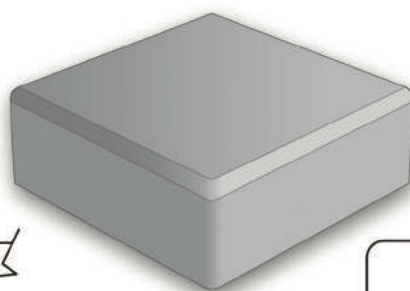




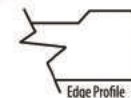
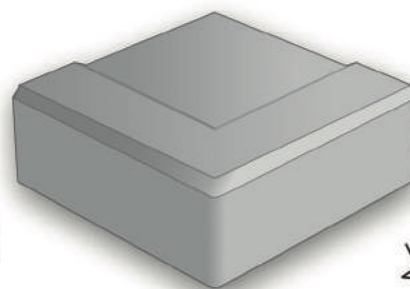
CLASSICTOP BEVEL EDGE



CLASSICTOP RADIUS EDGE



MARINE EDGE

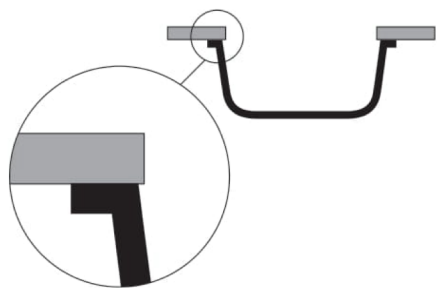


Epoxy Resin Sinks

HERAIS 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 Black, Grey & White colors.

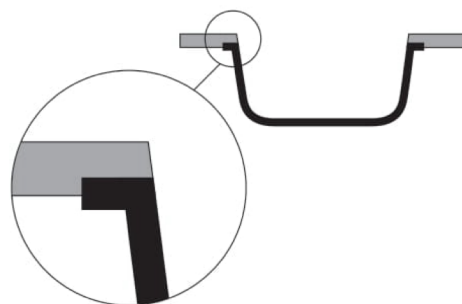
Overhang / Under-mount fitment

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.



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 Phenolic, HPL worktops as the core material is covered by the flange of the epoxy resin sink.



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

The A-Range is our latest range of molded 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 under-mounting. 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 molded 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.



Sinks - Overhang (Undermount) & Flush Fit

HERAIS standard range of sinks and troughs are molded complete with a fixing flange in order to simplify fitment and to optimize the integrity of the joint with the worktop.

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

Flush fitment involves rebating the sink into the underside of the worktop and then machining the top to give a smooth, crevice free joint.

Sinks are molded with a smooth, hardwearing and easy to clean and decontaminate inside surface. They are light and easy to handle.



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 1. 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 - A-Range (overhang, drop-in and flush fit)

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

Sinks - Overhang (Undermount) & Flush Fit

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



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 molded 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
SGS2-DI	260 x 110 x 150 mm.	7 mm	2 Kg
SS6-DI	350 x 300 x 200 mm.	9 mm	5 Kg
SGL10-DI	400 x 400 x 300 mm.	7 mm	9 Kg
SGR11-DI	500 x 400 x 300 mm.	10 mm	10 Kg
SR12-DI	550 x 365 x 250 mm.	10 mm	10 Kg
SPL14(X)-DI	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
SGS2-DO	260 x 110 x 150 mm	7 mm	2 Kg
SDS5-DO	300 x 200 x 200 mm	9 mm	4 Kg
SS6-DO	350 x 300 x 200 mm	9 mm	5 Kg
SGL10-DO	400 x 400 x 300 mm	7 mm	9 Kg
SM8-DO	450 x 365 x 200 mm	9 mm	7 Kg
SEL16-DO	600 x 450 x 300 mm	9 mm	12 Kg



Molded single drainer sink tops

These sink tops feature a worktop, sink and sloping drainer molded as a single seamless section. Sink tops from this range incorporate a ribbed drainer area which slopes to an integrally molded 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 HERAIS range as required. Sink tops 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 sink top. 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.



Fume Hood Cupboard Epoxy Resin Work Top

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 molded 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 HERAIS comprehensive range of sinks, dripcups and troughs.

Standard Bases One piece molded 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 molds available for many other sizes of fume cupboard base.

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



Many other sizes are also available.

Drip-cups

These drip-cups comprise an epoxy resin cup section into which a waste is fitted in order to provide a 1. 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
S501	Circular	80Ø x 65 mm
S500	Circular	137Ø x 75 mm
S497	Oval	150 x 70 x 110 mm
S499	Oval	229 x 76 x 110 mm
S1000	Oval	250 x 125 x 150 mm



Material specification

Thermal Properties

Thermal Shock	2000 cycles (90 sec. at 75 °C, 90 sec. dwell, 90 sec. at 15°C) No effect Should not be used with dry-ice or liquid nitrogen.
Smoke Emission	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 ²
Tensile Modulus	10,500 N/mm ²
Elongation at break	0.8%
Flexural strength	112 N/mm ²
Flexural Modulus	10,000 N/mm ²
Compressive Strength	190 N/mm ²
Coefficient of linear thermal expansion	34 x 10 ⁻⁶
Water absorption - 24 hours at 23°C	5-10 mg (0.06-0.068%) ISO 62 (1980)

Radioactive Decontamination

Decontamination factor (geometric mean)	BS 4247 Part 1 Test A 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.
- HERAIS may alter the specification of epoxy resin systems without notification



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