

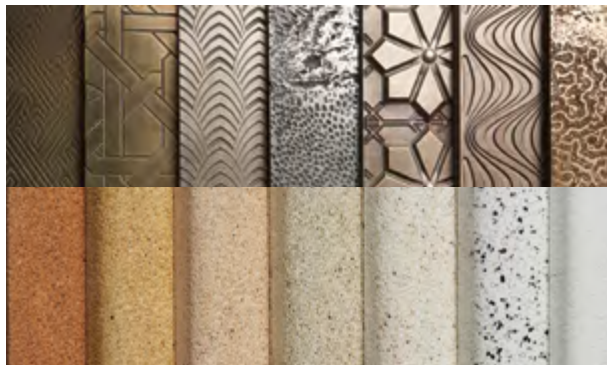
JESMONITE

Flints stocks a wide range of glass fibre products for use in the theatre and display industries. Jesmonite are the leading manufacturers of water-based glass fibre systems with many years of experience in the field. For solvent-based systems see page 103.

WATER-BASED GLASS FIBRE SYSTEM

JESMONITE[®]

MADE FROM



Jesmonite Water-based Glass Fibre System

Jesmonite is a water-based system with no harmful solvents. You can wash your brushes in water. It can even be applied directly to polystyrene. If using moulds, the lack of solvents means your moulds will last virtually indefinitely. Jesmonite AC100, AC300 and AC730 have BS 476 Part 6 and Part 7 Class 0 fire certificates so they are ideal for use in theatres and for theming applications. Work can be carried out almost anywhere as there are no requirements for expensive fume extraction systems. It has very little odour so staff and public can continue with little disruption. The products are supplied as a liquid and powder which are mixed together using a high shear mixing blade in an electric drill at around 1,000 rpm for about 45 seconds. The resulting mix can be poured into a mould or it can be used to form a strong laminate. The mix can be stiffened for vertical surfaces with the addition of a little Thixotrope or retarded by adding Retarder [page 101]. The products are supplied with full instructions.

Safety Data Jesmonite Acrylic Composites are classified as low hazard products with little or no toxicity. First time users should ask for safety data sheets or download them from flints.co.uk. Operatives should be provided with:

- Eye protection – goggles or glasses [page 321]
- Dust respirators [page 322]
- Hand protection – rubber gloves [page 323]

How much will I need?

To estimate coverage, a 5 mm thick laminated panel in Jesmonite will weigh about 8.725 kg per m² when wet and 8.25 kg per m² when dry. Therefore, a 70 kg kit will cover about 8 m².

For accurate measuring why not buy some scales? [page 107]



JESMONITE AC100



Harder, stronger and better weather resistance



AC100 is a weather-resistant product suitable for interior or exterior use. It is harder and has a higher impact strength than AC300. If being used outside the product should be protected with Jesmonite Acrylic Sealer [page 102]. It is fire resistant, having achieved a Class 0 fire rating under UK Building Regulations BS 476 Part 6 and Part 7. Normal casting and laminating requires a mix ratio of 2.5 parts Jesmonite Powder to Resin by weight but a mix ratio of 3:1 is often used for covering directly onto polystyrene.



Sadly, the Starter Kit is no longer available, but we do stock a 1 kg resin and a 2.5 kg powder.

AC100	powder	resin	kit size	code	price
Small kit	1 x 12.5 kg	1 x 5 kg	17.5 kg	JESAC100175K	£52.45
Large kit	2 x 25 kg	1 x 20 kg	70 kg	JESAC10070K	£179.50
Powder only	2.5 kg			JESACPOW250	£9.38
Powder only	12.5 kg			JESACPOW125	£23.65
Powder only	25 kg			JESACPOW25	£30.65
Resin only		1 kg		JESAC1001	£7.50
Resin only		5 kg		JESAC1005	£29.55
Resin only		20 kg		JESAC10020R	£125.00

AC100 Bulk	powder	resin	kit size	code	Tradeline
Bulk kit	10 x 25 kg*	5 x 20 kg	350 kg	JESAC100350K	£775.00
Resin only*	120 kg			JESAC100120	£530.00

* Bulk powder is supplied in bags. Bulk resin is supplied in a 120 kg drum. Bulk quantities are sent direct to your workshop, please allow 4 – 5 days.

JESMONITE AC300



Great value for general use



AC300 A good value product which is fire resistant, having achieved a Class 0 fire rating under UK Building Regulations BS 476 Part 6 and Part 7. Perfect for all indoor casting and laminating applications and for short-term use out-of-doors [see AC100 above for external use]. Normal casting and laminating requires a mix ratio of 2.5 parts Jesmonite Powder to Resin by weight but a mix ratio of 3:1 is often used for covering directly onto polystyrene.



Sadly, the Starter Kit is no longer available, but we do stock a 1 kg resin and a 2.5 kg powder [see above].

AC300	powder	resin	kit size	code	price
Small kit	1 x 25 kg	1 x 10 kg	35 kg	JESAC30035K	£73.45
Large kit	2 x 25 kg	1 x 20 kg	70 kg	JESAC30070K	£139.30
Powder only	25 kg			JESACPOW25	£30.65
Resin only		1 kg		JESAC3001	£7.92
Resin only		10 kg		JESAC30010	£44.89
Resin only		20 kg		JESAC30020	£77.58

Bulk Orders For large projects we can supply a 420 kg kit of AC300 delivered on a pallet direct to your workshop. The powder on these bulk deliveries is supplied in 12 x 25 kg bags and should be used within three months. The resin is supplied in a 120 kg drum. Our price includes UK mainland delivery. Allow 3-5 days.

AC300 Bulk	powder	resin	kit size	code	Tradeline
Bulk kit	12 x 25 kg	120 kg	420 kg	JESAC300420K	£699.95

JESMONITE AC730 STONE FINISHES



The 30 kg Kit consists of 25 kg Powder and 5 kg Resin. The 6 kg Kit consists of 5 kg Powder and 1 kg Resin.



Jesmonite AC730 Stone Finishes Jesmonite AC730 is a fast setting acrylic-modified cement-based composite. The system is designed for glass-reinforced decorative structures, and can also be used for small castings. It is chemically compensated against shrinkage and is of low permeability. AC730 is durable in all conditions of external weathering including water features. The compound has virtually no free-lime content, and has low alkalinity, leading to major reductions in efflorescence in comparison with ordinary Portland cement systems. The material contains a fine decorative aggregate and powder pigments, carefully controlled to give a consistent decorative surface finish after treatment with a proprietary Brick Cleaner or Acid Etch [page 102]. AC730 is available in seven stone finishes.

AC730 Stone Finishes Kits	code	6 kg kit	code	30 kg kit
Yellow Sandstone	JESFIL136K	£20.50	JESFIL130K	£72.50
White Marble	JESFIL236K	£20.50	JESFIL230K	£72.50
Silver/Grey Granite	JESFIL336K	£20.50	JESFIL330K	£72.50
Portland Stone	JESFIL436K	£20.50	JESFIL430K	£72.50
Bath Stone	JESFIL536K	£20.50	JESFIL530K	£72.50
Natural Stone	JESFIL636K	£20.50	JESFIL630K	£72.50
Old Terracotta	JESFIL736K	£20.50	JESFIL730K	£72.50
Black Charcoal	JESFIL936K	£20.50	JESFIL930K	£72.50

NEW TYPE

We've had lots of requests to buy the powders and resin separately for this system, so we have decided to let you pick and choose. For bulk quantities please call us for a quote.

AC730 Stone Powders	code	5 kg	code	25 kg
Yellow Sandstone	JESFIL1305	£11.95	JESFIL1325	£36.50
White Marble	JESFIL2305	£11.95	JESFIL2325	£36.50
Silver/Grey Granite	JESFIL3305	£11.95	JESFIL3325	£36.50
Portland Stone	JESFIL4305	£11.95	JESFIL4325	£36.50
Bath Stone	JESFIL5305	£11.95	JESFIL5325	£36.50
Natural Stone	JESFIL6305	£11.95	JESFIL6325	£36.50
Old Terracotta	JESFIL7305	£11.95	JESFIL7325	£36.50
Black Charcoal	JESFIL9305	£11.95	JESFIL9325	£36.50

NEW

AC730 Resin	code	price
1 kg	JESFILRES1	£8.30
5 kg	JESFILRES5	£35.50

NEW

Jesmonite AC730 Flex Resin When working with especially large moulds, makers sometimes prefer having a little more flex in their gel coat. This Flex version of the resin is offered to achieve this, but should not be used for the bulk of the casting.

AC730 Flex Resin	code	price
1 kg	JESRESFLEX1	£7.95
5 kg	JESRESFLEX5	£34.95

JESMONITE FLEX METAL GEL COATS



Jesmonite Flex Metal Gel Coats Jesmonite Flex Metal Gel Coats are the latest development in Jesmonite materials. They are supplied as kits in four finishes: Bronze, Silver Bronze, Copper, and Brass. They are designed to create a metal gel coat that can be applied into moulds, or onto coated substrates such as polystyrene foam, pre-coated with AC730. This is an extremely economical way of achieving beautiful metal finishes at a fraction of the cost. The Flex Metal Gel Coat can be reinforced using any of the AC730 Stone Finishes and quadraxial fabric. To achieve the best results the Flex Metal Gel Coats should be polished once removed from the mould. Please note, if you cannot brush the gel coat into a mould, but instead need to pour, you would need to use the Metal Fillers in combination with the AC100 or AC300 systems. See page 101. Larger, more economic, quantities available to order - please call us for details.

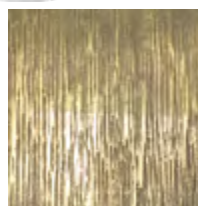
Flex Metal Gel Coat	code	650 g	code	3.25 kg
Bronze	JESFMBR06	£21.80	JESFMBR03	£78.30
Silver Bronze	JESFMSIL6	£37.50	JESFMSIL3	£155.55
Copper	JESFMCOP6	£21.80	JESFMCOP3	£78.30
Brass	JESFMBRA6	£21.80	JESFMBRA3	£78.30

NEW



Bosch GPO14 CE 240 V Professional Polisher

We decided we had to stock a decent polisher to bring out the best of these Flex-Metal finishes. When combined with the tapered thread and wire brush below this certainly does the trick! See Page 258 for full details and specifications.



The bottom part of this tile has been polished using this polisher and the wire brush below

☐ Supplied in a carton with: auxiliary handle, backing pad, D-handle, and lambswool bonnet.

Bosch GPO14 CE	code	list	price
Bosch GPO14 CE	POWGP014CE	£155.25	£139.95

NEW



Wire Brush Wheel and Tapered Cone Adapter

The cone bites into the wooden core of the wheel allowing it to be attached to the polisher above - much faster than hand polishing with wire wool!

Accessories	code	price
Tapered cone adapter [M14 internal thread]	POWM14TC	£25.45
Wire brush wheel [120 mm Ø x 16 mm, 0.08 mm steel wire]	ABR120ST	£19.92

JESMONITE CONTROL AGENTS



Jesmonite Retarder The pot life of the mixed Jesmonite at 15 - 18° C is from 8 - 15 minutes. This can be extended up to 30 minutes by adding 2 - 8 g of retarder per kg prior to adding the powder. However, a small test is recommended, as the precise timing is dependent on both temperature and mix size.

Jesmonite Retarder	size	code	price
AC100 and AC300	1 kg	JESIR	£6.45
AC100 and AC300	5 kg	JES5R	£24.70
AC730	1 kg	JESIR730	£6.45
AC730	5 kg	JES5R730	£24.70



Jesmonite Thixotrope Used in the preparation of AC100 and AC300 gel coats to control viscosity so that the material will not slump or drape on vertical surfaces. Thixotrope can also be used to make the material into a paste, which can be used as a filler for repair, or a jointing paste for bonding two laminates together. Add drop by drop until the desired consistency is achieved - typically 2 - 6 g per kilo of mix. [Not to be used with the AC730 Stone Finishes].

Jesmonite Thixotrope	size	code	price
	1 kg	JESITH	£14.80
	5 kg	JES5TH	£57.75

BOOKS ON MOULDMAKING AND CASTING



Mouldmaking and Casting [Nick Brooks] A technical manual with step-by-step illustrations explaining the materials required and the processes involved for a wide range of mouldmaking techniques. Especially useful on silicone moulds and casting techniques. For propmakers, model makers, and sculptors.

Mouldmaking and Casting	code	price
	BKSMC	£19.95



Advanced Mouldmaking and Casting [Nick Brooks] Aimed equally at the student and the professional wishing to further their skill base, this book provides an invaluable learning and reference tool for the studio or workshop of any artist, model maker, or designer.

Advanced Mouldmaking and Casting	code	price
	BKS262	£19.95

For more books, see page 354.



Like a demonstration?

Flints can organise a demonstration for interested groups.

JESMONITE COMPOSITE PIGMENTS



Jesmonite Composite Pigments Add up to 20 g per kilo of the total mix. We stock a 200 g pot size for smaller jobs. As Jesmonite is water-based it is tempting to tint it with water-based scenic paints. However, this is not to be advised as they can be detrimental to the curing chemistry.

Jesmonite Composite Pigments	code	200 g	code	1 kg
White	JESIWHT2	£4.95	JESIWHT	£11.75
Black	JESIBLK2	£4.95	JESIBLK	£11.75
Red Oxide	JESIRO2	£5.80	JESIRO	£14.80
Yellow Oxide	JESIWYO2	£5.80	JESIWYO	£14.80
Coade Brown	JESIC2	£5.80	JESIC	£14.80
Terracotta	JESIT2	£5.80	JESIT	£14.80
Bright Red	JESIBR2	£8.50	JESIBR	£22.45
Blue	JESIB2	£8.48	JESIB	£19.45
Bright Yellow	JESIBY2	£9.70	JESIBY	£22.45
Green	JESIG2	£9.70	JESIG	£22.45

JESMONITE METAL FILLERS



Metallic Fillers For addition to the AC100 and AC300 ranges, to give a decorative metal finish. If you wish to have a cleaner metal finish we would recommend going for a Flex Metal Gel Coat [page 100] however, if you are unable to brush into your mould and instead need to pour, these metal fillers give you that option with the AC100 or AC300 systems. They can be added to either just the gel coats, or to the whole composite.

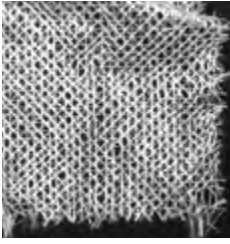
Add to a mix with an adjusted ratio to optimise the filler loading level. Jesmonite recommend the following ratio:

Liquids 300 g : Base 600 g : Metal Filler 700 - 1000 g

Once objects are de-moulded and dried, the surface can be burnished with 000 Wire Wool (see abrasives page 295) to bring out the metallic finish, alternatively you can machine polish [see page 100]. It's then recommended to seal with a wax polish or sealer [see page 102].

Metal Fillers	code	1 kg	code	5 kg
Bronze	JESMFBRO1	£25.56	JESMFBRO5	£112.98
Silver Bronze	JESMFSL1	£52.19	JESMFSL5	£231.60
Copper	JESMFCOP1	£28.05	JESMFCOP5	£119.98
Brass	JESMFBRA1	£25.56	JESMFBRA5	£112.98

JESMONITE REINFORCEMENTS



Quadraxial Stitched Glass Fabric Conventional glass matt fabrics are held together with a weak adhesive. The strong solvents in conventional resin systems will break down the adhesive so the fabric becomes pliable and is easy to use. As Jesmonite contains no solvents, the fabric would remain stiff and unworkable.

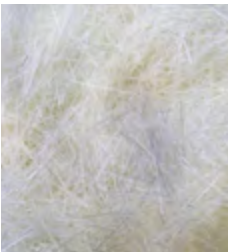
Quadraxial fabric has been specially developed with no adhesives for use with Jesmonite. It can be easily moulded into complex shapes and will resist high impacts. The open weave of the fabric makes it very easy to wet through. Generally two layers are required for a laminate 5 - 6 mm thick. The composite between each layer can be mixed with 6 mm chopped glass strands to form a thick paste which will separate the two layers of quadraxial fabric creating a rigid truss effect.

Quadraxial Stitched Fabric 220 g/m ²			code	price
roll width	roll length	area		
1.25 m	20 m	25 m ²	JES25QGF	£78.41
1.25 m	100 m	125 m ²	JES125QGFR	£360.95
1.25 m	per linear m		JESIQGF	£5.50



Chopped Glass Strands These can be mixed with the composite [2.5% by weight] to act as reinforcement between the two layers of glass cloth when laminating. 1% by weight can be added to reinforce castings. May also be used with solvent-based systems.

Chopped Strands	size	code	price
6 mm	1 kg	JESCS6	£7.95
12 mm	1 kg	JESCS13	£7.95



PVA Fibres PVA fibres are added to Jesmonite AC730 [page 100] as an alternative to glass fibres in all cast products such as garden ornaments and cast decorative panels. They are characterised by good adhesion and dispersion in Jesmonite composites, and by their high tensile strength and low elongation. PVA fibres will lead to improved flexural strength, and will help resist cracking and surface crazing in cast products. Typical addition rates are 1% - 2% of total mix weight.

PVA Fibres	size	code	price
	1 kg	JESPVA1	£25.25
	10 kg	JESPVA10	£208.95

MOULD RELEASE AGENT



APW Mould Release This is a universal release wax that will offer excellent release from a wide range of rigid mould compounds including plaster, Jesmonite, GRP, metal, wood, and glass. It can also be used on production equipment such as scales and casting tables to assist in cleaning. Silicone rubber-lined moulds require no release agent. NB: Some porous surfaces such as plaster and timber may need to be sealed before release wax is applied, and trials should be carried out to ensure that the product is suitable.

APW Mould Release	size	code	price
	500 g	JESRW	£14.46

SURFACE TREATMENTS



Jesmonite Flexiguard Sprayed on as a fine mist, Flexiguard chemically bonds with the surface of the AC730 stone finishes [and other Jesmonite cement-based composites] using nano-technology after which water just beads up and rolls off. We were impressed! Effectively permanent due to the chemical bond, it is UV-stable, prevents soiling and mould and fungal growth. It protects against frost, oxide corrosion by acid rainwater and salty coastal and marine conditions. Slightly cloudy but invisible when applied. Almost odourless.

Jesmonite Flexiguard	size	code	price
	1 kg	JESFS1	£31.95
	5 kg	JESFS5	£133.00



Jesmonite Acid Etch Used to expose the fine decorative aggregate in AC730. The acid removes the cement rich film from the surface of objects moulded in AC730 to produce a stone finish. When diluted with water it can also be used as a cleaner for removing marks from AC730. Please refer to the AC730 user guide for further technical information – downloadable at flints.co.uk.

Jesmonite Acid Etch	size	code	price
	5 kg	JESAE5	£19.70



Jesmonite Acrylic Sealer This is a general purpose clear matt acrylic sealer for AC100. It provides prolonged external surface durability while retaining the key attribute of flexibility. It can be diluted, and Jesmonite composite pigments [page 101] can be added to create colour washes to add patina or to age casts. It has a predicted external maintenance schedule of 6 - 10 years depending on the severity of exposure. Also works with AC300 but will not provide the same level of external protection.

Jesmonite Acrylic Sealer	size	code	price
	1 kg	JESICTC	£18.15
	5 kg	JES5CTC	£42.80



Jesmonite Penetrating Sealer This is specifically used when the sealing effect must be invisible [i.e. not a coating] but where good water, oil and stain resistance is required. It is particularly suitable for the Flex Metal surfaces [page 100] providing excellent protection whilst not affecting the metallic surface. It is also compatible with AC730 and will offer high resistance to all effects of external weathering.

Jesmonite Penetrating Sealer	size	code	price
	1 kg	JESPS1	£32.98
	5 kg	JESPS5	£125.00