



CAST IRON AIR BRICK COMPANY

Building Architectural Enhancements

riba
product
selector

Specification Sheet – CiabLong1-2018

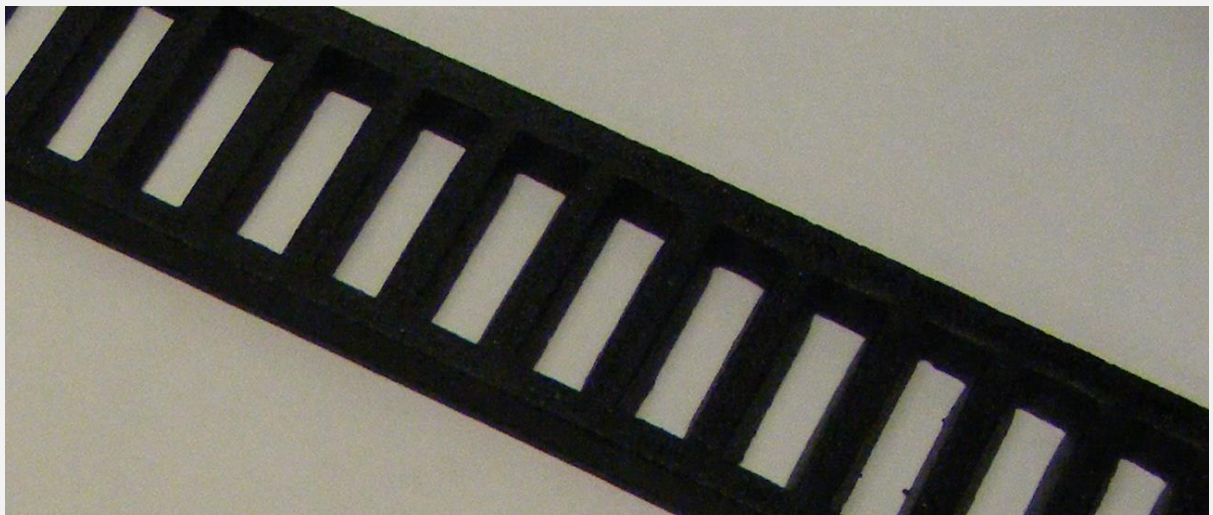
www.castironairbricks.co.uk

Cast Iron Long Gratings and Bearers

**Long Grating Designs - Slotted, Lattice, Daisy, Square Hole,
Ecclesiastical and English Scroll + Bearers**

**Items – SLOT363 – LAT363 to LAT369 – DAY303 to DAY364 – SH364
to SH3030 – ECC8, ECC12, ECC15 – ES7, ES9, ES13, ES18 - Bear36**





Cast iron long gratings and grilles are made from grey iron, cast in sand moulds bonded with resin to a fine cast finish and are available in various widths. They are imperial so are predominantly available in 3ft lengths. They are used either laid vertically for ventilation or laid flat as drainage gratings for walkways and pavements.

Uses

As already mentioned, grilles installed vertically are used as vents. The narrow vents, 3" (75mm) and 4" (100mm) wide are often used within the riser of a property entrance to create "under hallway" ventilation for double fronted and large single front Victorian and Georgian houses. This includes the 3" slotted grilles, the 3" and 4" daisy grilles, 3" and 4" lattice grilles and the 4" square hole grille.

When used as drainage channels, the larger lattice and square hole grilles can be used in conjunction with the cast iron bearers and cement/concrete to create a traditional way of draining and channelling water away from paved areas, patios and thresholds.

The English Scroll, Ecclesiastical and larger square hole gratings are especially suited to period properties to cover subterranean heating pipes, especially seen in greenhouse, orangeries and churches.

As with all our cast iron grilles, all these gratings are suitable for pedestrian traffic and will withstand the weight of people.

Examples

Narrow grilles are used quite often in London where we dispatch to numerous properties including narrow lattice gratings to the London Legacy Corporation involved with the 2012 Olympics in Stratford and the charming old power station at Tideway Yard. They are popular in mainly Victorian homes with double fronts and a central entrance hall especially in Oxford, York and Bristol and other large Victorian and Georgian cities.

Large ornate grilles in Ecclesiastical and English Scroll patterns are installed up and down the country in a range of properties and have even been used in sets for films! Unsurprisingly they are most likely to feature in larger residences, manor houses and halls including Stansted Hall and the Inigo Jones designed garden at Rotherfield Hall in Tunbridge Wells. We ship quite regularly overseas especially to Dublin and a number of estates in Ireland. Our most prestigious installation is at an address at Kensington Palace Gardens for a number of Ecclesiastical 12" wide grilles.

Churches are the main customers of our larger grilles, not just the ecclesiastical pattern as the name suggests but also the square hole grilles which are often used to cover the steam heating pipes along the nave and altar. Durham Cathedral and Buckfast Abbey in Devon are two examples and also Russian Orthodox cathedral London and Manchester Cathedral as well as countless smaller churches and chapels across the country.

The installation of the large SH3030 square hole grilles in the monks meditation garden at Buckfast Abbey are especially noteworthy as they were set into rebates cut into granite paths and the grilles used as bridges over a manufactured "calming" stream. See below for more photos...



Finish

These grilles can be either be a light primed black finish (for a natural finish more likely to blend with period properties) or painted black gloss (which will dull to a satin sheen after a year and prevent rusting for many years). We can supply bespoke RAL painted grilles to match customers' existing brickwork or requirements. Please note that items painted in such a way are nonreturnable, there is an additional charge for this and it will add 1-2 weeks onto the delivery time.

Environmental Benefits and Longevity

These cast iron grilles are UK made and are expected to last a lifetime. They are made in a traditional green sand method, the daisy grilles in the midlands, England and the others in Edinburgh, Scotland.

Cast iron is not affected by UV and is fire resistant and fully recyclable. The cast iron used in the manufacture of this product is sourced from scrap iron with the addition of a small amount of pig iron. On average, 95% of the casting is recycled material. The moulds used to create the castings are generated using sand that is packed in a box with one of our patterns and this sand is used again and again to create further castings.

Casting in the UK has ensured all our products are made to strict emission and pollution levels in accordance with the latest legislation and that the workers creating these products are fairly paid and have a safe working environment in which to earn a living.

Melting iron requires a substantial amount of energy from either gas or electricity and to offset the CO2 emissions from this process we have planted over 300 trees in our own 3 acre wood. The annual absorption of CO2 from our wood is enough to ensure the production of our castings is carbon neutral.

As we don't import any of our products, the mileage from foundry to our finishing workshop and distribution bay in North Devon is very low keeping our carbon footprint small and once installed we expect this air brick to last a life time.

Maintenance

Lightly painted grilles will eventually rust if the paint finish is not renewed every few years but this rust forms a protective layer to prevent further corrosion and requires no further maintenance. Gloss painted grilles use three part epoxy primer followed by two part epoxy black gloss top coat which is extremely hard wearing. If they are used as part of pavement or walkway they are going to get scratched and or exposed to salt so may need repainting at some point. The gloss paint will dull over time and is likely to dull to a satin sheen in a year or two. The longevity of painted gloss versus light painted grilles is unlikely to be of much consequence as we expect the cast iron that is used to make the grilles to last a lifetime before requiring replacement due to corrosion whether they are painted or left to rust.

Notes for architects

The grilles can be used either as a vent grille or as a drainage grille.

As a vent, under the front step of a house, it is ideal for use as a full 3ft (36") 910mm length so long as there is enough height to fit the grille. Grilles 3" high (75mm) are about the same height as a period brick, the 4" high grilles being quite a bit larger than the bricks. T

Although we state these grilles are available in 3ft lengths, there are a few that can be shortened and this includes the Daisy which is available in 30" as well as 36" lengths and the slotted 3" high grille which can be cut to almost any length. The square hole grilles can be used in the full 3ft lengths or can be purchased and specified in shorter pieces. Please note the shortened lengths of square hole grilles form around 250 different sized grilles and are the subject of another specification document entitled "made to measure grilles".

The Ecclesiastical, English Scroll and Lattice gratings are all fixed lengths of 3ft and we do not supply and do not recommend cutting them as the border of these grilles form part of the strength and they are particularly weakened when cut down (unlike the slotted, daisy and square hole grilles)

Mesh can be used with this grille but only when it is used for ventilation and installed vertically. Grilles used for drainage with mesh fitted will block the moment it rains rendering the drainage holes useless. Because the Ecclesiastical and English Scroll grilles are mainly used as a drainage grille there is no option to buy it with mesh on the website to prevent mesh being accidentally installed. If you do require mesh and plan to install it as a vent please note this will have to be done via a proforma and not online.

When using these grilles for drainage, a channel has to be made in cement or concrete and cast iron bearers can be used for a more authentic, period look. The cast iron bearers, sunk into the wet cement will form strong unbreakable permanent slots for the cast iron grilles to sit in and be easily removed. If intending to use this method and incorporate the cast iron bearers please note the bearers, like the grilles are imperial and sold in 3ft lengths (910mm) so should match up.

We can supply grilles drilled or undrilled in the corners for securing. Drilling is normally only required for securing grilles used for ventilation as grilles laid flat for drainage will usually hold themselves in position.

It may be possible to upgrade modern plastic, pressed steel "Aco" and channel gratings by swapping our square hole or lattice cast iron tops. When attempting to do this please bear in mind that these cast iron grilles are imperial and the longest lengths we have are 3ft long which is approximately 90mm shorter than the metric grilles. If you were to replace ten metres of metric grilles you would need 11 lengths of imperial grilles. A better solution is to use the cast iron Quatrefoil channel gratings system which includes a cast iron metre long grille in a plastic metre long channel, please see our specification sheet on Quatrefoil Channel grating for information.

Long grilles are normally held in stock lightly primed in black and are painted black gloss to order which normally takes 5-7 days. We can supply then unglossed if preferred which will reduce the delivery time to just two days.

SPECIFICATION TABLE – LONG SLOTTED GRILLE					
Item Code	Nom. Size (Inch)	Size in mm	Weight (KG)	Free Area (mm2)	Plate Thickness (mm)
SLOT363	36 x 3	910 x 75	4	32000	10
SPECIFICATION TABLE – LATTICE GRILLE					
LAT363	36 x 3	914 x 75	3	21000	9
LAT364	36 x 4	914 x 102	7	33000	10
LAT366	36 x 6	914 x 152	8	58000	10
LAT369	36 x 9	914 x 225	10	82000	10
SPECIFICATION TABLE – LONG DAISY GRILLE					
DAY303	30 x 3	767 x 75	3.5	22000	12
DAY363	36 x 3	918 x 75	4	26000	12
DAY304	30 x 4	767 x 100	4.5	22000	12
DAY364	36 x 4	918 x 100	5	26000	12
Material – Grey cast iron 250					

British Made Product

Slotted and lattice made in Edinburgh – Daisy made in Wolverhampton, England.

SPECIFICATION TABLE – ENGLISH SCROLL GRILLE

Item Code	Nom. Size (Inch)	Size in mm	Weight (KG)	Free Area (mm ²)	Plate Thickness (mm)
ES7	36 x 7	905 x 170	9	57000	8
ES9	36 x 9	914 x 230	10	68000	8
ES13	36 x 13	914 x 325	14	90000	12
ES18	36 x 18	914 x 450	25	150000	12

SPECIFICATION TABLE – ECCLESIASTICAL GRILLE

ECC8	36 x 8	914 x 203	9	60000	12
ECC12	36 x 12	914 x 305	12	90000	12
ECC15	36 x 15	914 x 380	15	100000	10

Material – Grey cast iron 250

British Made Product

Cast Iron Foundry Source - English Scroll and Ecclesiastical made in Edinburgh

SPECIFICATION TABLE – SQUARE HOLE GRILLE

Item Code	Nom. Size (Inch)	Size in mm	Long Border mm	End Border mm	Square Hole Size	Rows of Holes	Columns of Holes	Weight (KG)	Free Area (mm2)	Plate Thickness (mm)
SH364	36 x 4	910 x 100	10	5	10	4	5	52	26000	9
SH365	36 x 5	914 x 127	15	6	14	6	5	44	43000	14
SH366	36 x 6	914 x 152	18	18	13	7	6	42	43000	12
SH367	36 x 7	914 x 178	11	11	14	7	8	46	72000	12
SH368	36 x 8	912 x 200	16	22	15	9	8	40	72000	12
SH369	36 x 9	910 x 227	10	13	15	9	10	44	100000	12
SH3610	36 x 10	914 x 253	21	23	15	11	10	40	90000	13
SH3611	36 x 11	910 x 273	20	20	15	11	11	40	100000	13
SH3612	36 x 12	913 x 300	15	23	14	13	13	41	105000	12
SH3615	36 x 15	914 x 380	13	22	15	17	17	41	160000	14
SH3618	36 x 18	914 x 456	20	11	14	20	20	42	165000	14
SH3621	36 x 21	914 x 533	32	18	21	33	14	26	160000	14
SH3030	30 x 30	765 x 765	17	17	17	27	31	31	277000	12

For more details please see our website...

<https://www.castironairbricks.co.uk/product/qcg-channel-grating-quatrefoil/>

Alternatively email or call us

Sales@castironairbricks.co.uk

01598 711999

Delivery for this product is normally from stock for low volume orders and these are sent out the next working day for orders of lightly primed black grilles of 6" width or under if the order is received before 12 o'clock. For larger grilles over 7" wide that require a pallet delivery please add a day or two for us to arrange delivery. For fully glossed black grilles these take 5-7 days. If we need to paint to a customer supplied RAL then these are typically 10-14 days

Cast Iron Air Brick Company, Down Farm, Brayford, EX32 7QQ



CAST IRON AIR BRICK COMPANY

Building Architectural Enhancements

Specification Sheet – ciabLong1-2018

riba
product
selector

www.castironairbricks.co.uk