

Heritage Statement & Schedule of Repair Accolaid/14/00212/CMP

Alterations, Additions For Restaurant Conversion V.6.

25 South Street, Emsworth
Hampshire, PO10 7EG.

1.0 **Generally**

1.1 This Heritage Statement and Schedule of Repair is in pursuance of a planning application to Havant Borough Council. The works are to convert the existing Grade II listed shop and store buildings into a Restaurant. The proposals include internal alterations, new external openings and part restoration of existing historic features.

1.2 No other purpose is anticipated or accepted. Copyright of this report remains with Martin Critchley, Chartered Architect.

1.3 Reference should be made to the planning submission drawings for details of the proposals, ref:

1456	-	101	Survey Plans & Elevations
		201	Location Plan
		202	Block Plan
		302	Historic Uses Plan
		314	Proposed Ground Floor
		315	Proposed Upper Floors
		411	Proposed Elevations
		412	Proposed Elevations
		517	Servery Details
		602	Barn Screen Details
		603	Window Details – Typical
		605	Conservation Rooflight
		606	New Entrance Doors (N & E)

607	New Kitchen External Door (S)
609	Barn Screen, Bedroom Partition and Gate Details
610	Terrace Railing Details
614	New South Window
615	New North Window
616	Chimney Breast Details
617	Staircase Details

2.0 Context

- 2.1 South Street is a part of 'Old Emsworth', running north/south between the square and the harbour quays. The site is on the west side, fronting directly on to the public footpath. The site extends through, westward, with a rear access from the public car park behind.
- 2.2 The building would appear to be a pair of Georgian cottages, possibly three, which have been combined into one premises, the greater part of which has been converted in to a shop, with the installation of a Victorian shopfront and fascia. A large central chimney breast remains with evidence of hearths on both sides, and which was probably once, on a party wall dividing the cottages.
- 2.3 There is a large timber framed barn at the rear, probably Georgian, latterly used as a store, and previously used for some form of production process. This retains a fine open, four bay roof, with three principle roof trusses supporting purlins and jack rafters.
- 2.4 An earlier rear yard in the south west corner of the site has been adapted to form a store with rough, stud framed and clapboarded walls, and a low pitch 'cat slide' roof. This is proposed to be demolished.
- 2.5 The Blue Bell P.H. is immediately to the south, and to the north, No.23 South Street, is a bland double fronted house, post WW.II, built as a builders order office and yard. No.23 is now in the control of the applicants for No. 25.
- 2.6 The subject shop in No. 25 was last used as an off license.
- 2.7 The fabric of the building is generally in poor condition and in need of general repair and maintenance. The roofs appear to be

reasonably sound, such that rain penetration is not a major problem.

2.8 Various recent exploratory and alteration works within the building have raised concerns, which require to be addressed in the Grade II Listed context of the building. Namely :-

1. Loss of plaster ceiling coving to GF front RH room. (North – east corner).
2. Partial loss of brick chimney breast, as 1.
3. Partial loss of flint rubble infill panels to stud wall, forming east end of barn/store.
4. Staircase replacement.

2.9 All of the following require attention:

Slate roof to cottages requires repairs.
 Barn roof – asbestos sheet – requires replacement.
 Rainwater goods require replacement.
 Structural timber posts rotten at base.
 Floor joist ends rotten at wall bearings.
 Plumbing installation requires replacement.
 No viable heating installation.
 Electrical installation requires replacement.
 Internal decoration throughout.
 External decoration overall.

Schedule of Repair

3.0 **Roof – Cottages.**

3.1 Replace damaged slates with salvaged welsh slates. East – street elevation.

3.2 Replace broken and missing plain clay pegtiles. West – rear facing slopes.

3.3 Re-bed ridge and hip tiles.

3.4 Replace lead flashings to verges, chimneys etc.

Roof – Barn

- 3.5 Remove profiled asbestos sheet covering.
- 3.6 Re-cover with Spanish slates (S.S.Q. 'Del Carmen') on treated battens on breather membrane. Install 'conservation' pattern, centre bar rooflights, one each side, in roof slopes of east truss bay. (The inner end of the barn).
- 3.7 Fit new softwood fascias, and new rainwater goods to be cast aluminium to original patterns. Stove enamelled black.
- 3.8 Fit new insulation, phenolic foam panels between and under jack rafters, leaving truss frames exposed.
- 3.9 Repair rotten or broken roof frame members (rafters, purlins etc.) Re-instate struts to two number truss frames, with mortice/tennon joints and hardwood pegs to match originals. Rotten rafter feet to be scarfed or splinted to retain as much of originals as possible. There is a ready supply of suitable timber members in the stollage frame, to be removed from the Barn. See 7.5 below. Similarly with any other failed members – to be spliced or matched in parallel with new members, to retain the originals in position.
- 3.10 Replacement rainwater goods will be Messers Alumasc 'Heritage' cast aluminium, stove enamelled black. Channel profile 'Beaded deep run', with matching downpipes. See Appendix V.
www.alumascrainwater.co.uk

4.0 External Walls

- 4.1 Repoint brickwork locally, particularly at high level. Repointing is to match the immediate adjacent pointing – lime mortar to be used, mostly flush pointing.
- 4.2 Bricks for repairs – Ibstock Laybrook Imperial red Stocks (68mm) laid in lime mortar.
- 4.3 Bricks for new works to be a blend of:
 - 40% Ibstock Dorset Red Stocks
 - 40% Ibstock Berkshire Orange Stocks
 - 20% Weinberger 'Cirencester grey Multi'

Pointing to new brickwork to be 'bucket handle' finished, with a white cement/silver sand mortar.

- 4.4 An existing ground floor, external store area in the south west corner of the site (beside the barn structure) built with rough timber stud walls, weather board clad, with a low pitch, profiled sheet roof is to be demolished. Replacement works are proposed on the same footprint, with cavity walls and external facings as 4.3 above. The rebuilt section to be kitchen stores and food preparation areas on the ground floor, with a small terrace on the first floor (access via the existing internal staircase), for the use of smoker patrons. See 11.5 below.
- 4.5 The existing shop front, fascia and surround is to be refurbished. Burn off paint build up. Fill and bring forward. Repaint in matt paints by Messers Farrow and Ball (www.farrow-ball.com) Colours 'Black Blue 95' and 'Purbeck Stone 275'. Replace lead head flashing.
- 4.6 It is not proposed to use the existing central shop door as the new restaurant entrance. The door will be refurbished and fixed shut. The inset entrance area will be finished with a plant trough and menu display stand in the style of a parish notice board.
- 4.7 The north most street entrance door, originally a cottage window, currently with a glazed door and sidelight, is proposed for the new restaurant entrance. The glazed door and sidelight to be removed and replaced with a single 1.0 m half glazed door with a fielded bottom panel, appropriate for the cottage, and suitable for wheelchair access. Decoration as 4.5 above.
- 4.8 The west wall (gable) of the barn is of plain modern brickwork, with a central door opening. There is evidence of an earlier window opening immediately north of the door opening (Left as viewed from outside). At bottom left is a small area of patched and compromised stone work, possibly the remains of an earlier boundary wall. It is proposed to demolish the rear gable wall, and rebuild it with a full height. central glazed screen to display the inner structural frame of the barn, and French doors at ground level to provide access to the rear courtyard. Decoration to the screen as 4.5 above. The new brickwork piers to either side of the glazed screen to be as 4.3 above, laid Flemish bond with grey headers.

- 4.9 Two new openings are proposed in the north wall of the barn, both in the location of earlier openings. There is an opportunity to remove the temporary store shelters at the rear of No. 23, See 2.5 above. This will open up the north side of the barn to pen view. The reinstated openings to be a window, as 5.6 below, and a door as 4.7 above. The external reveals to be dressed in salvaged and replacement bricks as 4.2 above, and with gauged brick arch heads.

5.0 **Windows**

- 5.1 The existing windows are to be serviced and to remain. Replacement bars and beads where required are to be to the original sections and mouldings.
- 5.2 Replace all sash cords. Free up paint bound sashes. Free off and lubricate seized sash pullies. Replace parting beads. Check and adjust balance weights (lead collars). Replace missing balance weights.
- 5.4 Replacement glazing where required to be cast glass and not polished plate. Putty to be linseed oil based.
- 5.5 Burn off (+scrape) and repaint matt 'Old English White'.
- 5.6 Windows in the new works are to be timber framed with moulded beads and frames. Painted finish – 'Old English white'.
- 5.7 Following demolition of a shed in the rear of No.25 South Street a small, presumably 17C, oak framed barred window, was revealed in the north wall of the Barn building. This window has square oak vertical bars set diamond pattern. This window is to be retained and 'overclad' with a plain glazed oak frame, to retain and display the original frame and bars.

6.0 **Internal floors & Stairs**

- 6.1 Approximately 30% of original or early (Pre machined tongued and grooved edges) floor boards remain on the first floor.
- 6.2 Floor boards will have to be lifted for upgrading works to the service installations. Boards are to be lifted with care, as 6.1 above.

Replacement boards in areas of original timber are to be second hand timber of matching thickness and width.

- 6.3 The upper floors, and the south east area of the ground floor (the southern part of the original cottages) are to be carpeted upon completion. Relay the floor boards as 6.1 above. Overlay with tempered hardboard before carpet laying. The balance of the public areas on the ground floor – i.e, the barn and the rooms around the chimney breast, will be refinished with oak floor boards, with half lapped edges.
- 6.4 In the centre of the ground floor is single WC compartment, the lobby floor of which has early terra cotta paving bricks. These are to be retained, as is the WC function.
- 6.5 An early ground floor rear room, on the south side, presumably once a kitchen, has a stone flagged floor. This is an area proposed for new toilets and stores. It is proposed that the flags are lifted and re-used to form the upgraded courtyard at the rear (west).
- 6.6 Floor joists with rotted ends (into wall sockets) will not be replaced, but will have repairs made to them with scarfed sections of replacement timber, and the addition of wrought iron reinforcing plates, with coach bolts, or through bolts as appropriate. In some locations a 'splint' in the form of a short bressemer beam will be required .
- 6.7 The existing staircase is of Victorian origin, and is much compromised, particularly the flight between first and second floors, which is almost impossible to negotiate without gymnastic skills. See 1456-101. This staircase is located within the Georgian (east) Part of the building, and is clearly not original. It is of a closed strings with housed treads construction, and the heandrills are too low for current use. It is generally in poor condition with broken and missing spindles, and inadequate support to the upper4 flights. Our 'best guess' is that the original Georgian cottages had tight 'winder' staircases beside the chimney breast, one in each cottage, although no evidence for such has been found to date. No other evidence of original or early staircases has been found.
- 6.8 The opportunity in refurbishment is to replace the stairs with a design that reflects the Georgian origins of the building, and meets

the legal requirements of the Building Regulations, appropriate to the new restaurant use.

6.9 The replacement staircase is proposed to be a recreation of a contemporary Georgian staircase with the following features :-

- A. Carriage frames.
- B. Cut strings.
- C. Tread end carved scrolls.
- D. Turned and fluted pattern spindles and newels.
- E. Ex 100x75 moulded handrails.
- F. Swept handrail scrolls at ground level.
- G. Radiused ends to tread #1
- H. All exposed parts to be of seasoned oak, dark stained, and overstained to simulate aging.

6.10 The staircase is in a prominent location within the front serverly of the restaurant. The overall objective of the replacement stairs, apart from improved utility, is to provide an enhanced feature appropriate to the period of the buildings, which match in detail the other finishes retained from the Georgian cottages.

7.0 **Internal Walls and Partitions.**

7.1 Localised repair plastering is required. New chasing of walls will be required for upgrading of the service installations. Replastering to be with lime based rendering mixes, and 'restoration' plaster mixes. Hardwall plasters are to be avoided. Most of the existing walls are lining paper surfaced or wall papered. This is generally to be perpetrated. Damaged and chased areas of wall will be refinished with new lining paper or counter lining before wallpapering. General stripping of plaster and replastering is not proposed.

7.2 In the south west corner of the barn there is an internal brick built kiln enclosure, with a corbelled brick cover. Possibly part of a drying or baking process. This structure post dates the barn structure and is to be removed.

7.3 A new opening is proposed in the south wall of the barn, combining two original openings and the panel between, to form

the new restaurant servery. See drawing 1456-504. Salvaged timber from Barn stollage (7.5 below) to form new lintol.

- 7.4 An original door opening in the southwest corner of the Barn, at the back of the 'kiln' as 7.2 above, currently bricked up (20 C bricks) is to be re-opened with a new stable door to act as the kitchen service access.
- 7.5 A heavy timber stollage frame in the barn, approximately 1.5 M above floor level, formed of 250x190 timber baulks is to be removed and salvaged. Recovered timbers are to be used for repairs variously as above, for replacement lintols to the chimney breast, and for general repairs to floor joists and wall studs as described.
- 7.6 As 2.6.2 above, there is a large chimney breast in the middle of the former shop, immediately north of the central entrance door. This once had hearths to both sides (north and south). The north side latterly had a #20C tiled fire surround, in front of at least two earlier arrangements of coal grate hearths, progressively reducing down the original 'inglenook' Georgian opening for open log burning. The later additions are to be removed, and the earlier open form re-instated, with a contemporary wide fire basket and cast iron back plate. There are sufficient salvageable old bricks on the south side of the breast to complete this alteration satisfactorily, and with a replacement lintol from the stollage salvage. See 7.5 above. Drawing 1456-608.

The south side hearth has been similarly reduced down, and has been blocked up with a wide variety of bricks from early and late periods in random association. The heavy over mantel timber lintol is missing and will replaced with salvaged timber as 7.5 above. The earlier open hearth format will be reinstated.

- 7.7 As 2.6.3 above, the east wall of the barn, presumably once an external wall, now an internal wall, is formed of vertical timber studs approximately 180x120 sections (varying) at approximately 750 c/s. The studs are infilled with uncoursed random flints set in a rough lime mortar. Sections of the infill have been removed, although the flints have been bagged and remain on site. Several of the studs have rotted at their bases (skirting level) and are close to failure.

The failed studs are to be temporarily supported and to have replacement sections scarfed on to them, with a double 'Z' scarf with hardwood cross dowels.

- 7.8 One of the stud bays as 7.5 has lost it's original horizontal brace (tenon jointed). This bay is proposed to be a permanent access opening between the barn and the front cottage. The immediately adjacent panel to the north, above the waist rail, is to be left open as an internal 'window'. For the remainder of the wall, the missing flint infill is to be reinstated. The original sections of flint remaining appear very random and casual, probably achieved by temporary shuttering to the wall faces and simply tipping in a mix of flints and mortar, and leaving it to go off enough to remove the shutter boards, before proceeding up the wall with the next section.

It is proposed to re-instate the flints by a similar method, utilising plywood shutters in lifts of 450mm, and dropping in the flints, with a mortar matrix of pre-mixed natural hydraulic lime and coarse sand, as W.T. Lambs – NH 3.5 L, AM mortar. When shutter boards are removed, the surface mortar is to be brushed off to reveal the form of the outer flints. To retain the flint panels a 20x20 hard wood bead is to be pinned around the perimeter of the panel on the centre line of the studs, fixed with galvanised pins.

We are happy that any approval will be conditioned for a SAMPLE PANEL of the flint re-instatement, to be prepared, inspected and approved, before proceeding to the full re-instatement.

- 7.9 As 2.6.1 above, the decorative plaster coving in the ground floor front room, north side, bounded by the chimney breast and the north wall has been lost. The cove was an early Victorian floral pattern, heavily encrusted with paint finishes. It is proposed to re-instate the coving with cast plaster of paris cove sections as Messers 'Simply Mouldings' – SM26 'Floral Scroll Cornice' (01932-848323 – sales@simplymouldings.co.uk) decorated with a heavy application of 'filler' foundation paint to disguise the newness of the mouldings. Finished in white emulsion.

- 7.10 An original oak framed partition on the first floor between the proposed Letting Room #1, and the adjacent en suite bathroom, is to be retained, with a new door opening, at the point in the frame currently compromised as a serving hatch. Drawing 609.

7.11 The Victorian cast iron fire surround in Letting Room #2 is to be retained. A matching salvage coal grate will be sourced to complete the hearth.

7.12 Areas of high usage – passages, servery etc. are proposed to be finished with dado panels of tongued and grooved matchboarding with a 'v' groove and quirk, and with a bolection top moulding. Decoration as 7.10 below.

The north wall of the ground floor room, north side of the chimney breast, is currently part stripped back to brickwork. It is proposed that this wall only be refinished with plain oak, library panelling with a 200mm 'torus' oak skirting

7.13 Local making good to architraves and skirtings to be in softwood to existing patterns. Modern 'easiclean' architraves to be replaced with matching contemporary profiles in softwood. The lifting of the floor boards, and the installation of new electrical circuits will require the removal of approximately 50% of the skirtings. The process of refixing will enable some uniformity to be established through the building.

7.14 Much lath and plaster remains in the building. This is to be retained wherever possible. Locally damaged areas are to be reinstated with new laths, and with galvanised 'chicken wire' mesh stapled through 'live' areas of lathing. Make good with lime plaster. Patched areas to be resurfaced with heavy lining paper, which will also stabilise small areas of detached lath.

7.15 Redecorate to contemporary colour schemes with 'heritage' paints, and contemporary wall paper patterns to the principal rooms. Gloss paints will not be used. Paints by Messers Farrow and Ball (www.farrow-ball.com) are proposed. Final colour schemes and paint samples to be agreed before decoration.

8.0 Internal Doors and Cupboards

8.1 Some original doors and cupboards remain, some with original ironmongery. These are to be retained and restored. In many instances ironmongery fixings have been compromised with modern drive screws, these are to be replaced with slotted steel screws and iron clout nails as appropriate.

- 8.2 Service existing doors and ironmongery. Replace inappropriate ironmongery (Victorian and 20C) with contemporary pattern knobs, spindles, roses, and rim latches, in wrought iron and cast brass as appropriate.
- 8.3 New and replacement doors are to be of matching pattern, fielded panel softwood construction with morticed and tenoned frame joints. Lamina panels and dowelled joints will not be used.
- 8.4 Redecorate to contemporary colour schemes as 7.10 above
- 9.0 **Electrical Installation.**
- 9.1 The electrical installation is out of date, inadequate, and of doubtful integrity. It requires replacement. Much of the existing installation is surface run with cable clips.
- 9.2 Rewire all power and lighting circuits. Add smoke detector circuits and intruder alarm circuits.
- 9.3 Existing structural timbers are not to be chased or drilled for cable routes. Cables are to be run in wall chases and floor voids. Exposed cables are to be run in PVCu 'mini trunking' painted to match the surrounding wall panels. Cable ducts to be created by battening off skirting boards and dado rails in finished areas.
- 9.4 No contemporary precedent exists for electrical accessories. New accessories to be in 'Victorian black nickel'. This is proposed as the least obtrusive option.
- 10.0 **Mechanical Services Installation.**
- 10.1 As with the electrical installation, the plumbing installation is overdue for replacement.
- 10.2 Remove existing gas fired boiler.
- 10.3 Remove lead cold water riser.
- 10.4 Remove galvanised steel roof tanks.

- 10.5 Provide new hot and cold water down services through out. See 9.3 above regarding duct routes.
- 10.6 Provide new above ground waste pipes and connections through out. The existing cast iron stacks date from the 1960's and are in poor condition, and crude design. The internal stacks to be replaced with PVCu to current legislation and to facilitate connection of all the new fittings. The stacks will all be concealed in duct casings.
- 10.7 Provide replacement sanitaryware throughout.
- 10.8 Provide new central heating installation. It is proposed to locate the new boiler plant on the first floor, adjacent to the stairs, where an existing cupboard backs on to the central, open well.
- 10.9 Modern flexible pipework allows ease of installation, and less intrusion in concealed areas. See 6.2 regarding floor lifting and 9.3 regarding duct routes. Exposed pipework to be copper. Iron radiator feeds to be threaded barrel to match.
- 10.10 There is no precedent for contemporary radiators. Our clients preference is for cast iron column radiators as the earliest and most appropriate manifestation of radiator design.
- 10.11 The new commercial kitchen extract is a necessary provision to be accommodated. It is proposed to utilise the central well area for the fan and filter plant, and to exhaust the flue, through a new 'dummy' chimney stack between the barn and the kitchen. This has two advantages:-
- A) The plant and flue are out of sight.
 - B) The flue outlet is way from the neighbouring properties.
- 10.12 As 10.11.A above, details are attached at Appendix III, of Soler & Palau industrial fan – Model TCBBx2/4-450 and Attenuator SIL-CZO (450 dia.). Also Jasun Filtration activated carbon filter, Model DC 242412/8-7C.

11.0 External Works

- 11.1 Break out existing rear yard concrete slab and delivery ramp. Reduce levels.
- 11.2 Create rear courtyard, paved with salvaged stone flags as 6.5 above. Finish with gravel beds and planted borders.
- 11.3 Erect 1.8 metre high, brick wall to parking area at rear of 23 South Street. Parking area NOT in control of applicants. Wall to be 225 brickwork as 4.3 above, garden wall bond, half round coping bricks.
- 11.4 The existing brick, west boundary wall to the car park, approximately 1.5 M high is in poor condition. Part demolish and rebuild to 1.8 M high, with additional bricks as 4.2 above. Form new access opening, and install pair of new close boarded gates. Drawing 1456-609.
- 11.5 A small first floor terrace is proposed, facing west (Car Park) for smoking patrons. This is to be screened from the properties to the south by a 1.8 M high screen wall, lime rendered to the south, similar to the existing south face walls, with a brick string course at chamber joist level, and reconstituted stone coping stones.
- Railings to the west edge of the terrace are to be simple steel pales finished in black, with a moulded oak handrail. Drawing 1456-610.

12.0 Appendices

- I Simply Mouldings – Plaster Cornice details
- II Lamb's Natural Lime Mortar – details
- III Soler and Palau extract fan - details
- IV Jasun Filters – details
- V Alumasc 'Heritage' rainwater goods.

Martin Critchley, Chartered Architect.

7, North Street, Havant,
Hampshire, PO9 1PW.

#3 3rd November 2014

#4 13th January 2015

#5 5th March 2015

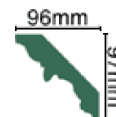
#6 8th July 2015



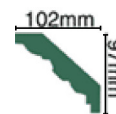
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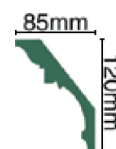
SM6 Acanthus Cornice
£27.60 (Incl. VAT) per 3m length



SM26 Floral Scroll Cornice
£27.60 (Incl. VAT) per 3m length



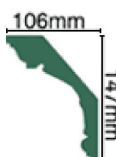
SM49 Waterleaf Cornice
£27.60 (Incl. VAT) per 3m length



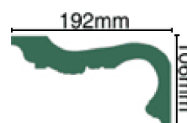
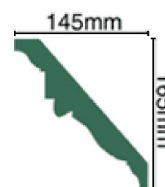
SM68 Leaf & Bead Cornice
£27.60 (Incl. VAT) per 3m length



SM60 Honeysuckle Cornice
£28.80 (Incl. VAT) per 3m length



SM19 Large Acanthus Cornice
£30.00 (Incl. VAT) per 3m length



PRODUCT CATEGORIES

CORNICE

VICTORIAN CORNICE
EDWARDIAN CORNICE
GEORGIAN CORNICE
OGEE CORNICE
OGEE CORNICE
COVED CORNICE
ART DECO CORNICE
EGG & DART CORNICE
DENTIL CORNICE
ACANTHUS CORNICE
ALL CORNICE

CEILING ROSES
CORBELS
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PANEL MOULDING
DADO RAILS
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EXTERNAL MOULDINGS

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Addlestone. KT15 2SD
Tel. 01932 848323
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Showroom Opening Hours
Mon - Fri 9am to 5.30pm
Sat 9am to 1pm
Sun Closed



Lambs Natural Lime Mortar ^{v6}

Pre mixed natural hydraulic lime and sand mortar. A general purpose mortar for building or pointing stone, brick and block: available in different strengths, sand gradings and colours.

General Information

Lambs Natural mortar is a dry pre-bagged lime mortar made with St Astier pure and natural hydraulic lime and including pigments where required.

Four different sand textures are available;

<u>Texture</u>	<u>Sand size</u>	<u>Minimum joint size</u>
TF	approx 1.5mm and down	5
F	approx 2mm and down	6
M	approx 3mm and down	10

Lambs has wide range of colour options; colour chart available on back page or on request.

Packing and availability

Available in 25 kg paper bags or sealed one tonne bulk bags for use with the mini silo system. All colours other than basic off white (AM) made to order.

Bulk density and consumption

Wet bulk density: 1900kg/m³ +/-100.

Repointing: 20kg/m² stonework; 7kg/m² brickwork.

Per 1m of wet mortar: building 1200-1800 bricks.

Per 1 tonne of dry mortar: building approximately 1000 bricks.

All figures approx.

Guidance on mortar choice

Mortar application	Natural Lime Mortar type
General solid masonry Dense masonry, parapets and lintels	Medium mortar <i>Made with NH3.5 lime</i>
Above roofline, below DPC incl. copings and cappings Earth retaining walls	Strong mortar <i>Made with NHL5 lime</i>
The correct specification for any mortar should consider the structural requirements, nature and condition of the background, site exposure, time of the year and type of finish required. Less porous masonry units and harsh climates require greater mortar strength.	

Mixing

Add 25 kg of **Lambs Natural mortar** into a drum mixer, avoid creating excessive dust. Add only 4 to 5 litres of clean water. Pour the water in slowly as the product mixes, using just enough to achieve the correct workability. Mix for 3 to 10 min. Lambs mortars may be reworked up to 8hrs. Please contact us for further information.

Application

Before pointing or building clean and remove all dust and loose material from joints and masonry, and adequately dampen dry or high suction surfaces. Pointing and building mortars should be finished the same day or the following day in cooler periods. Lime mortars require longer curing times than cement, but the methods and principles of application are similar. When pointing or laying hard impervious masonry and / or during damp cool weather lime mortars may take a few weeks before being fully able to resist frosts. Do not use in temperatures less than 5 °C or over 30°C.

Curing

Hydraulic lime mortars do not set as quickly as modern cement based materials; hydraulic lime starts to set once water is added and also

hardens by reacting with carbon dioxide which is a slow process. Strength and long term durability are achieved over months, not days. Success relies on proper curing of the mortar. Protect the mortar against the effects of drying winds, strong sunlight, rain and frost. In warm weather gently mist spray with water after application and cover if required with damp hessian sheets. In cool weather cover fresh mortar with protective sheeting to help avoid frost damage.

Further information available upon request.

Performance

Product type	Strong mortar	Medium mortar	Soft mortar
Compressive strength N/mm ² 28 days	>2	>1.5	>1
Compressive strength N/mm ² 90 days	>4	>3	>2
Resistance to Freeze Thaw / sulphates	High	Medium	Med/Low
Elasticity moduli MPa	9500	7300	6250
Vapour exchange Gm air x m ² x hour x mmHg	0.5	0.64	0.71
Capillary water absorption kg(m ² .min ^{0.5})	<1.0	<1.0	<2.0

Full declaration of ingredients

20%+	Silica sand Limestone sand
1% to 20%	Natural Hydraulic Lime (NHL2, 3.5 or 5)
0.1% to 1%	Clay Mineral pigments (optional) Tallow (from animals)
Below 0.1%	Cellulose (from plants) Air entrainer (manmade)
Others;	None

Health & safety

Risk Phrases

R36/37/38 Irritating to eyes, respiratory system and skin
R66 Repeated exposure may cause skin dryness or cracking

Safety phrases

S22 Do not breathe dust
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S24/25 Avoid contact with skin and eyes
S36 Wear suitable protective clothing

This is not a specification. Trials should be undertaken on old surfaces & backgrounds to ensure compatibility. Lime plasters do not set or perform like gypsum or cement based materials

Natural Hydraulic Limes (NHL) for site mixing

Ionic NHL3.5 Off White 25kg

Ionic NHL5 Mushroom 25kg

St Austier NHL3.5 Off White 25kg

St Austier NHL5 Mushroom 30kg

PRICES ON APPLICATION – PLEASE CALL OUR SALES OFFICE – 01403 785141

Consumption: between 10-12 bags of NHL and 1.7 tonnes of sand are required per m3 of mortar.

1) Deliveries

- | | |
|--------------------------------------|---|
| a. Guaranteed deliveries dates/times | Not available under any circumstances |
| b. Delivery expected | An estimate at the time of ordering of when to expect delivery. Subject to change. |
| c. Delivery 48hr Standard | Delivered on an 18 tonne lorry in two working days following manufacture Unloaded to a flat area of hardstanding. Signature required on delivery. |
| d. Delivery Next Day | Delivered on an 18 tonne lorry in a working day following manufacture. Unloaded to a flat area of hardstanding (not gravel or mud). Signature required for the delivery. By request only. |
| e. Delivery am | As above, but delivered before 12 noon. By request only. |
| f. 7.5 tonne lorry | As above but on a 7.5 tonne lorry. By request only. |
| g. Hiab | Delivered on a 18 tonne hiab vehicle. By request only. |
| h. Artic | Artic delivery. Must have forklift on site. |
| i. Courier | Next working day via national courier such as DHL – requires signature. |

Prices ex VAT and ex works

Product

Natural Mortar AM (Normal Off White) 25kg

Natural Mortar AM (Normal Off White)

1000kg

Two strengths available based on NHL3.5 and NHL5 Lime. "Strong" NHL5 strength mortar best for cavity construction, below DPC and above roof line. Medium NHL3.5 strength mortar for general purpose work.

Prices on application. Please call our Sales office on 01403 785141

Natural Mortar Standard Colours (from BM-LM)

25kg

Natural Mortar Standard Colours (from BM-LM)

1000kg

Natural Wealden Sandstone Mortar 25kg

- Special mix for Philpots Quarry

Natural Wealden Sandstone Mortar 1000kg

- Special mix for Philpots Quarry

Pure Lime premixed mortars made with Natural hydraulic lime and sand. Just add clean water and mix for 5-10 minutes. 25kg mortar to 4/5 litres of water .

Bulk Bags are subject to haulage costs and palletway costs.

Texture Standard texture is < 3.3mm sand, fine and coarser sand are available to order.

Consumption One 25kg bag will lay 25 bricks in a 10mm joint, therefore one tonne will lay 1000. In one m3 of mortar there are 65 x 25kg sacks of 1635kg

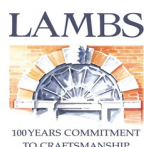
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Availability Almost all mortar products are made to order. Generally 25kg bags of mortar are available in 7 working days and 1 Tonne Bulk Bags available in 10 working days.

Arch Mortar

Lambs Lime Putty Arch Mortar including Silver Sand - 10kg

Supplied in 10kg (20 litre) tubs. Only requires very thorough stirring before use. Suitable for joints 2-6mm. A 4 course arch requires approx 4-5 kg of Lambs Lime Putty Mortar.



LAMBS

Nyewood Court, Brookers Road, Billingshurst, West Sussex, RH14 9RZ
T: 01403 785141 F: 01403 784663 Email: Sales@LambsBricks.com Web: www.LambsBricks.com

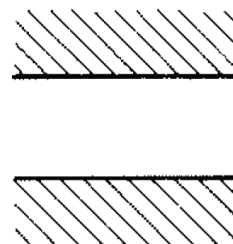
12 colours; further colours are available by arrangement.

Lime Mortar Joints Colours

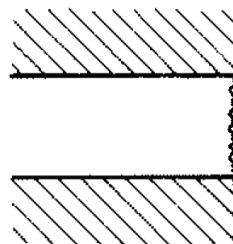
- The colour of the joint will be effected by various factors
- A metal tool will give a tighter more polished finish
- A wood tool will give a more open texture and will expose some of the aggregate
- Tamping the surface with a bristle or churn brush after the initial set will expose the aggregate a give a conservation texture to the joint.
- Tamping the surface too soon can bring the fines to the surface creating a dense skin inhibiting the proper curing of the mortar.
- Once the surface of the mortar is firm (usually the next day) lightly scraping the surface to expose the aggregate can improve the appearance of the mortar and make the joints less visible.
- This process should not be undertaken before the surface has
- stiffened or mortar will be smeared onto the face of the stone
- Lambs Natural Lime Mortar is available in a standard range of

Joint Shape

- Flush – smoothed with metal tool – scraped with wooden tool
- Slightly recessed 1mm – conservation finish achieved by tamping with bristle brush.
- Tuck pointing – white lime putty applied to fresh lime bedding mortar by pointing specialist.
- It is strongly recommended that a site sample reference panel is constructed from the first delivery in order to establish the exact colour and shape of the mortar joint.



Flush



Tamped

Standard Lime Mortar Colour Chart

This is a general indication of colour. No warranty is given or implied that the goods will all respects be equal to these images. A site sample panel should always be built. 25 Kg bags of these colours are available.





CONTRARROTATING CASED AXIAL FANS

TCBBx2 / TCBTx2 Series



Range of cylindrical cased axial fans fitted with aluminium impellers and manufactured from high grade rolled galvanised steel and protected against **corrosion by cataforesis primer and black polyester paint finish.**

Fitted with **2 contrarrotating complementary impellers** manufactured from die-cast aluminium. All models are supplied with pre-wired wiring junction box located on the outside of the fan casing for easy wiring access.

Available with single or three phase 4 poles motors.

Motors

All the motors are **IP65**, Class F insulation (1), equipped with **thermal protection.**

Single phase motors are variable voltage (for TCBBX2/4-630, only if the ambient temperature is up to 40 ° C).

Three phase motors suitable for inverter control.

Electrical supplies:

Single phase 230V-50Hz. (Capacitor located inside the wiring terminal box).

Three phase 400V-50Hz

(1) Working temperatures from -40°C up to 70°C.

A P P L I C A T I O N S



Warehouses



Workshops



Commercial premises



Naval industry

Contra rotating: High pressure



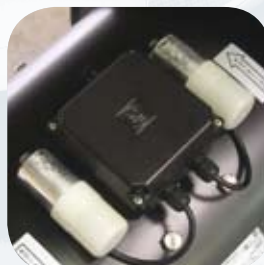
Contrarrotating system with two complementary impellers **allowing the duplication of the pressure** with the same air volume

Corrosion resistance



Rolled steel casings and motor support **protected by cataforesis primer and black polyester paint finish.**
Stainless steel screws

Terminal box



Wiring **terminal box** with cable gland PG-11

Impeller dynamically balanced



Impellers are dynamically balanced, according to ISO 1940 standard, giving vibration free operation



Technical characteristics

Before installation check that the product electrical characteristics listed on the data plate label (Voltage, power, frequency etc) match those of the intended electrical supply.

Model	Speed (r.p.m.)	Maximum absorbed power (kW)	Maximum absorbed current (A)	Sound pressure level (dB(A))	Maximum air volume (m³/h)	Weight (kg)	Speed controller*
TCBBx2/4-450	1370	1,24	5,40	74	6900	42	RMB-8
TCBBx2/4-500	1300	1,70	7,30	76	9400	50	RMB-8
TCBBx2/4-560	1340	3,25	15,50	78	14300	66	-
TCBBx2/4-630	1280	3,90	19,00	79	18200	80	-
TCBTx2/4-450	1400	1,25	3,40	74	6900	42	RMT-5
TCBTx2/4-500	1340	1,75	3,60	76	9400	50	RMT-5
TCBTx2/4-560	1360	3,12	5,80	78	14300	66	VFTM TRI 4
TCBTx2/4-630	1370	4,20	8,00	79	18200	80	VFTM TRI 5,5

* Three phase speed controllers (RMT) or inverter control (VFTM) are suitable for 400V.

Acoustic characteristics

The sound levels –NPS– shown in the technical characteristic chart, correspond to the value of sound pressure dB(A), measured in free field conditions at a distance equivalent to three times the diameter of the impeller with a minimum of 1.5 meters.

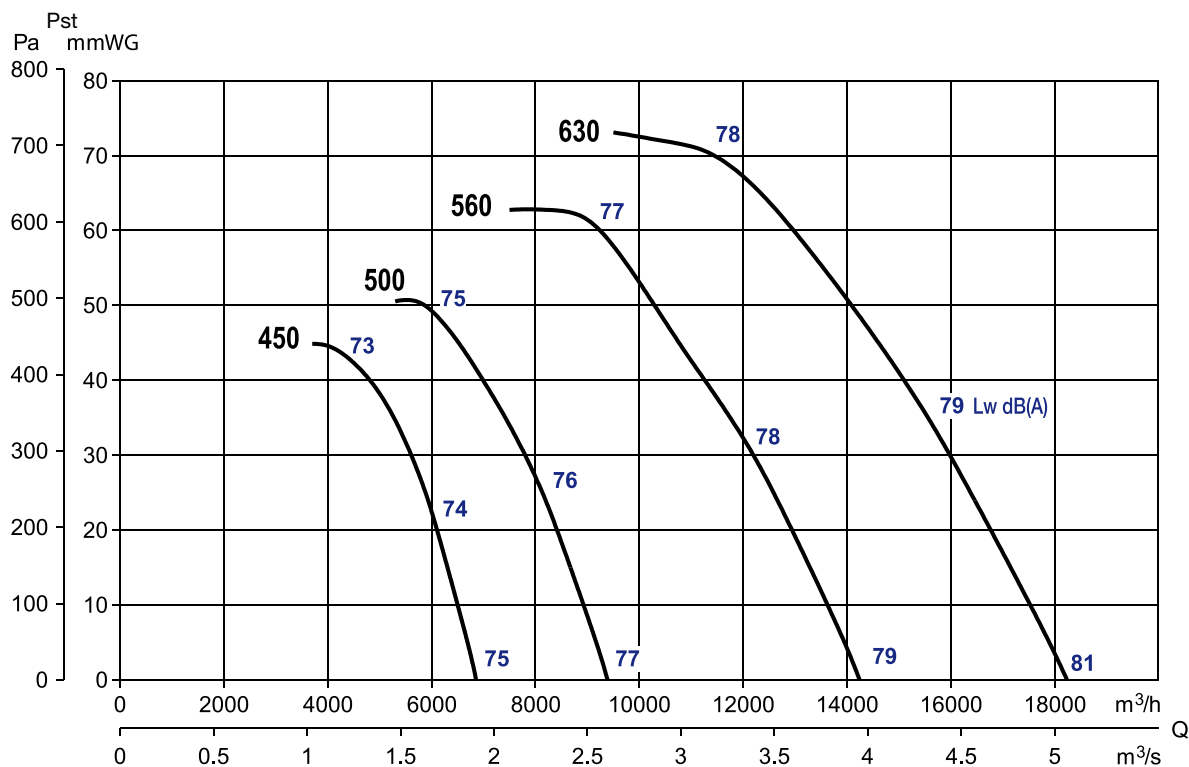
The following table shows the sound power level spectrums in dB(A) measured with the fan ducted, at both inlet and discharge sides.

Model	Air volume m³/h	63	125	250	500	1000	2000	4000	8000	Global
450 Inlet	6600	46	73	85	82	85	79	72	64	90
	5850	46	73	84	81	83	79	71	64	88
	4300	58	70	80	80	83	79	71	64	87
450 Outlet	6600	63	75	86	85	87	82	74	67	92
	5850	53	73	85	84	87	81	74	67	91
	4300	58	70	82	83	86	82	74	67	90
500 Inlet	9000	48	78	87	85	87	81	74	67	92
	7500	52	76	85	85	85	80	73	65	90
	6000	60	73	83	82	85	80	73	66	89
500 Outlet	9000	65	76	87	88	90	84	77	70	94
	7500	62	75	86	87	88	83	76	69	92
	6000	59	72	86	85	88	83	76	69	92
560 Inlet	13720	50	85	87	88	91	85	78	73	95
	10800	57	79	83	86	89	84	78	72	93
	9000	63	79	81	86	89	84	78	72	92
560 Outlet	13720	74	86	85	91	94	88	81	75	97
	10800	70	82	84	88	92	87	81	74	95
	9000	74	81	85	89	92	87	81	74	95
630 Inlet	17500	51	85	91	89	93	87	80	74	97
	15600	55	85	85	88	91	86	80	73	95
	12000	64	80	84	88	90	86	80	73	94
630 Outlet	17500	73	87	88	93	95	89	83	77	99
	15600	71	87	86	91	94	89	83	76	98
	12000	67	84	86	90	94	89	84	76	97

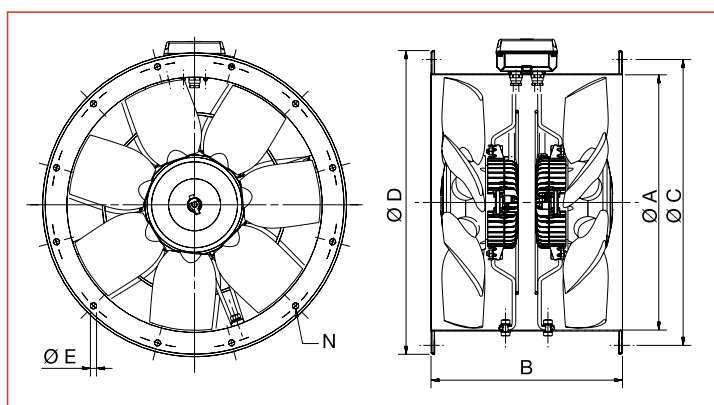


Performance curves

- Q = Air volume in, m³/hr and m³/s.
- Pst = Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

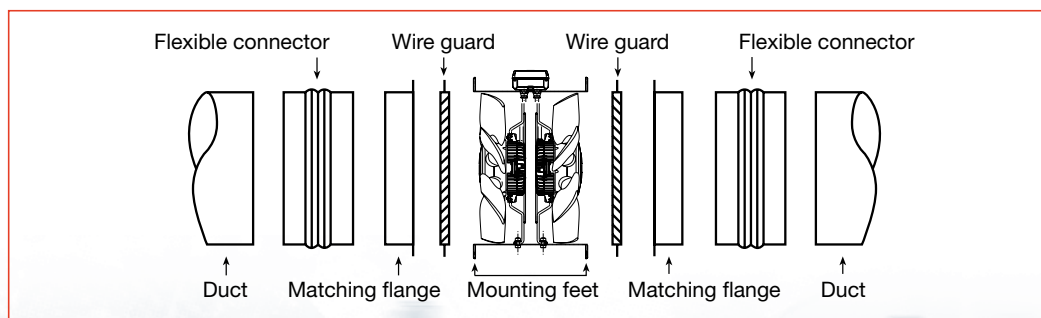


Dimensions (mm)



Model	Ø A	B	Ø C	Ø D	Ø E	Number of holes N
450	537	375	500	450	12	8
500	595	375	560	500	12	12
560	655	520	620	560	12	12
630	725	520	690	630	12	12

Mounting accessories



GENERAL DESCRIPTION

These filters are manufactured for ease of installation and incorporation into ducted air systems. They can be used on both supply for purifying incoming air, and can be used on the extract to remove toxic gasses and odours generated within a process.

Construction

These modules are manufactured by mounting a series on carbon panel filters with a sealed case. The airflow is epitomize by presenting the filtering surfaces in a "V" formation.

Each carbon panel is sealed into the filter case so as to ensure no air can bypass the carbon granules.

The panels are manufactured using long established bonding techniques which hold the activated carbon granules in a rigid biscuit. The biscuit is encapsualted in a carbon impreganted cloth which prevents any leakage of granules or powder.

The unique bonding method used by Jasun Filtration ensures that, unlike our competitors filters, that the panels will remain intact and rigid even if wet.

Stock Grades of Carbon

208 - Good general Carbon grade suitable for many applications

209 - Copper Coated Carbon for use in Mueums and archives

KI - For enhanced garlic odour removal

Typical Applications include:

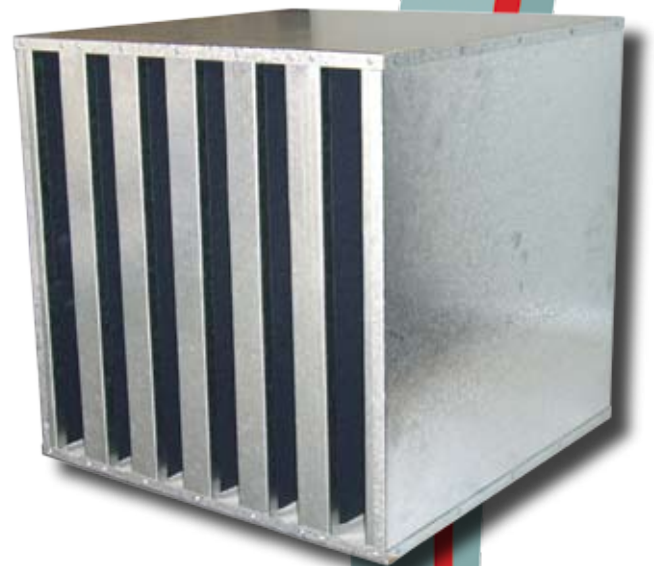
- Elimination of Cooking Odours
- Removal of Kerosene Exhaust Fumes
- General Odour Removal
- Smoke Removal
- Neutralisation of Ammonia and its

Derivatives

- Removal of Formaldehyde
- Removal of Airborne Pollutants and

Contaminants

- Removal of Acid Gases (H_2S , SO_2 , NOX , HCl)



ENVIRONMENT



EMS 81914
BS EN ISO 14001:2004

QUALITY



FM 29257
BS EN ISO 9001:2000

Jasun Filtration Plc
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Info@jfilters.com

[Http://www.jfilters.com](http://www.jfilters.com)

MultiCarb Cells STANDARD SIZES

No.	Nominal Size (Inches)	Height (mm)	Width (mm)	Depth (mm)	Weight of Carbon (Kg)	Cell Weight	Capacity @ 0.1 Second Dwell Time
DC-CF1-7C	24 x 24 x 8	594	594	197	10	22	800
DC-CF1-HALF-7C	24 x 12 x 8	594	291	197	5	11	400
DC242412/8-7C	24 x 24 x 12	594	594	292	13	24	990
DC121212-7C	12 x 12 x 12	297	297	297	6	12	450
DC181812-7C	18 x 18 x 12	445	445	297	13	25	990
DC241212-7C	24 x 12 x 12	594	297	297	13	25	990
DC242412-7C	24 x 24 x 12	594	594	297	25	36	1900
DC-CF2-7C	24 x 24 x 16	594	594	397	18	34	1370
DC-CF2-HALF-7C	24 x 12 x 16	594	291	397	9	18	685
DC-WA15-208	24 x 6 x 18	144	600	440	7	13	533
DC121218-7C	12 x 12 x 18	292	292	451	10	15	761
DC181818-7C	18 x 18 x 18	445	445	451	19	26	1445
DC241218-7C	24 x 12 x 18	594	297	451	18	26	1369
DC242418-7C	24 x 24 x 18	594	594	451	36	52	2740
DC121224-7C	12 x 12 x 24	292	292	597	13	19	990
DC181824-7C	18 x 18 x 24	445	445	597	25	36	1900
DC241224-7C	24 x 12 x 24	594	297	597	25	36	1900
DC242424-7C	24 x 24 x 24	594	594	597	50	61	3800

LINEAR VELOCITY M/SECOND V'S PRESSURE DROP
MULTICARB ACTIVATED CARBON CELLS

