MATERIAL & COMPONENT SPECIFICATION

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THIS FACT SHEET SHOULD BE READ IN CONJUNCTION WITH OUR SHELL ERECTION SCHEDULE — FACT SHEET NO. 13 - WHICH CLEARLY SETS OUT WHO IS RESPONSIBLE FOR EACH AREA OF THE CONSTRUCTION

A standard delivery comprises the materials and components listed below. Any additional materials required will be supplied only if included in the Schedule of Variations forming part of the Final Order documentation.

Note: Materials and components supplied as standard are printed in regular print with optional extras shown in *bold italics*.

In order to permit a policy of continuous improvement and innovation, Scandia-Hus reserve the right to alter the specification and any materials and components described therein, without prior notice.

SUBSTRUCTURE

All substructure by builder, constructed to Engineers, Local Authority and warranty provider's requirements and in accordance with Scandia-Hus' setting out drawing and tolerances.

GROUND FLOOR CONSTRUCTION Solid Floor

'U' Value - 0.18 W/m²k

- 100 mm foil-backed rigid insulation
- Medium gauge (125 microns) polythene vapour control layer (VCL)
- 70mm screed (by builder)

Note: Insulating floor blocks to be used except under load-bearing walls, where blocks with min 7N/mm2 strength must be used. (Builder to supply and fix as part of beam and block floor).

DPC:s and Wall Soleplates for Timber Frame

- 225 mm polymer damp proof course (DPC) laid to all external perimeter and internal load-bearing walls.
- 3½ no. 47 x 147 mm sole plates, pressure impregnated and structurally graded, to all external perimeter and internal load bearing walls (47x97)
- Galvanized sill plate clips, complete with associated fixings, fitted at 1200 mm centres around all external wall panels and internal load bearing walls (300 from corners and door openings)

EXTERNAL WALL PANEL CONSTRUCTION

'U' Value - 0.16 W/m²k

Pre-fabricated wall panels supplied in small panel format for delivery to site on articulated trailers or rigid
flatbed lorries for off-loading by all-terrain telescopic handler or other mechanical aid. Standard panel
height is nominal 2.4 m. If required, panel heights, lengths and shapes can be specifically fabricated to
customers' design.

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Construction of external wall panels viewed from inside:-

 15 mm taper-edged plasterboard with fixing screws. The 15mm board provides increased density, adding the benefits of greater strength and sound insulation, and providing a medium for simple and secure wall fixings

- 105mm Actis multi foil insulation between studs
- 45mm Actis Hybrid multi foil insulation across stud face
- 47x47mm 600 centre horizontal cross battens to provide service void
- 47 x 147 mm pressure impregnated and structurally graded studs and plates.
- 9 mm Orientated Strand Board (OSB)
- Glidevale Thermo Foil Protect TF200
- Marker tapes located at 600 mm centre stud positions
- 47 x 47 mm cavity barrier, factory-fitted at eaves and joinery jambs, faced with 100 mm DPC (where masonry clad)
- Optional pressure impregnated external timber cladding available

INTERNAL LOAD-BEARING WALLS

- Pre-fabricated 47 x 97 mm stud walls
- 100 mm high density (24 Kg/m³) Rockwool insulation
- 15 mm tapered-edge plasterboard to each face with fixing screws

NON LOAD-BEARING WALLS

- 47 x 97 mm stud walls
- 100 mm high density (24 Kg/m³) Rockwool insulation
- 15 mm tapered-edge plasterboard to each face with fixing screws

Roof s

Standard profile:

- 27° roof pitch standard for bungalow designs
- 45° roof pitch standard for chalet designs
- Alternative roof pitches or hipped and half-hipped roofs available as options

ROOF CONSTRUCTION - (FROM WALL PLATE UP)

- 47 x 147 mm pressure impregnated and structurally graded binder plate
- Engineered roof structure to suit particular dwelling design
- Roof trusses members/trusses secured to head binder plates and load-bearing walls with galvanised steel truss clips. Fink trusses supplied for single and two-storey designs, with attic trusses for chalet designs.
- Trusses are delivered to site partially or fully assembled and are constructed from pressure impregnated and structurally graded timber. Other structural roof components likewise treated
- Factory assembled gable ladders
- 9 mm perforated (only attic trusses), conditioned grade F2, Orientated Strand Board roof sarking board
- Protect VP400 roof membrane
- 22 x 47 mm pressure impregnated counter battens
- All necessary fixings to comply with design requirements
- 9mm Orientated Strand Board up-stand fixed to binder plate
- Tile battens supplied by builder

Recommended minimum size 25 x 50 mm, spaced to suit tile manufacturer's specification

Roof pitches and designs can be specially fabricated to customers' specification

SLOPING CEILINGS - CHALET DESIGNS WITH ROOMS IN THE ROOF

'U' value - 0.14 W/m² k to skeilings

- 150mm Actis multi foil insulation between studs
- 45mm Actis Hybrid multi foil insulation across stud face
- 47x47mm 600 centre horizontal cross battens to provide service void
- Medium gauge (125 microns) polythene vapour control layer (VCL), including tape
- 15 mm tapered-edge plasterboard and fixing screws

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FLAT CEILINGS - CHALET DESIGNS WITH ROOMS IN THE ROOF

'U' value - 0.15 W/m²k when combined with insulated rafters above

- 100 mm high-density (24 Kg/m³) Rockwool insulation
- Medium gauge (125 microns) polythene vapour control layer (VCL), including adhesive tape
- 47x47mm 600 centre horizontal cross battens to provide service void
- 15 mm tapered-edge plasterboard and fixing screws

FLAT CEILINGS - BUNGALOW DESIGNS WITHOUT ROOMS IN THE ROOF

'U' value - 0.12 W/m²k to flat ceilings

- 400 mm high-density (24 Kg/m³) Rockwool insulation supplied in two layers 200 mm and 200 mm, laid at right angles to one another.
- Medium gauge (125 microns) polythene vapour control layer (VCL), including adhesive tape
- 47x47mm 600 centre horizontal cross battens to provide service void
- 15 mm tapered-edge plasterboard and fixing screws

BARGES AND FASCIAS

28 x 145 mm pressure impregnated timber for fascias boards

22 x 145 mm pressure impregnated combi-board timber for barge boards (builder fix)

SOFFIT BOARDING

- Pressure impregnated combi-boarding to closed soffits and gable overhangs
- Over-fascia vents to cold roof spaces

DORMERS (if applicable)

A variety of sizes and styles available, including :-

- 18° mono pitch, 1, 2 or 3-bay dormer
- 27° gabled or hipped roof, 1, 2 or 3- bay dormer
- 45° gabled or hipped roof, 1, 2 or 3- bay dormer
- Factory assembled front and cheeks (as well as gable end panel, where appropriate)
 Specification as for external wall panels
- Optional timber cladding to dormer front, cheeks and gable end panels available if required Specification to suit dwelling design

ENTRANCE PORCHES

Recessed, covered porches, cantilevered 'English' style porches as well as 'Victorian' or 'Swedish' style porches supplied as standard for some designs – *available as options for all house types*

GABLE HEADS

Bungalows and Houses (Designs where there are no rooms in the roof)

- 47 x 147 mm impregnated studs and plates
- 9 mm Orientated Strand Board (OSB)
- Glidevale Thermo Foil TF200 breather membrane
- Factory-fitted marker tapes at stud locations
- Uninsulated

Chalets (Designs with rooms in the roof)

'U' Value - 0.16 W/m² k

Specification as for external wall panels

GABLE HEAD CLADDING

Vertical or horizontal cladding to gable heads - standard for some chalet balcony gable heads only – *optional for all house types*

Vertical cladding:-

- 145 x 22 mm pressure impregnated, tongued and grooved combi-boarding
- 22 x 47 mm horizontal battens @ 600 mm centres
- 22 x 47 mm vertical battens @ 600 mm centres

Horizontal cladding:-

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- 145 x 22 mm pressure impregnated, tongued and grooved combi-boarding
- 47 x 47 mm vertical battens @ 600 mm centres

TILE HANGING

Where tile hanging has been specified, all counter battens, tile battens, tiles and any other cladding materials to gable heads, dormers and/or first floor elevations supplied by builder

GABLE HEAD BALCONY - supplied as standard for certain chalet designs

- 47 x 220 mm pre-cut pressure impregnated and structurally graded joists
- 22 x 95 mm pressure impregnated balcony decking
- 22 x 95 mm pressure impregnated open boarding to underside of balcony
- Insect netting for underside of balcony decking, where required
- Balcony support post(s) and beams
- Galvanized steel support bracket(s) for post(s)
- Pressure impregnated top rails and balustrading

INTERMEDIATE FLOORS

2-storey designs only

- 47 x 220 mm pressure impregnated and structurally graded timber @ max. 600 mm centres
- 47 x 220 mm pressure impregnated and structurally graded timber blocking
- 200 mm high density (24 Kg/m³) Rockwool insulation to provide sound proofing between floors
- 22 mm tongued and grooved moisture resistant flooring grade chipboard (V313 TG4)
- Adhesive and screws for chipboard

WINDOWS AND EXTERNAL DOORS

'U' Value - 1.0 W/m2k

Main Entrance Door

- 1000 mm wide o/a frame, insulated, aluminium-lined, outward opening, panelled oak front door (Inward opening available as an option, see Optional material & Component fact sheet)
- A wide selection of optional designs and finishes available see our Door Range brochure
- Seven-lever ASSA-2002, mortise dead-lock security lock, brass or stainless steel door furniture.
- Pre-fitted draught sealing strips
- Matching triple glazed sidelight standard for certain designs available as option for all house types

Windows

- Standard Scandia-Hus windows and glazed doors are made of pressure impregnated Redwood, fitted with triple glazed, sealed units and draught excluders
- Windows are site-fitted in wall panels with adjustable screw fixings and embedded in silicone. If included in the contract, this work will be undertaken by one of Scandia-Hus' factory teams
- DPC site-fixed to rebated heads, jambs and sills, stapled and siliconed to form weather seal
- Safety glass supplied to comply with statutory glazing requirements
- Obscured Cotswold glass supplied for bathrooms and WC's
- Locking, 'aluminium' coloured window handles supplied to all opening windows
- Ventilators fitted to top sash of all opening windows (unless Mechanical Ventilation Heat Recovery is chosen)
- Child proof locks fitted to all opening windows
- Internal window sills provided for all windows
- 35 mm wide, brown or white, powder coated, galvanised metal flashings to windows and French doors
- Planed, external cover board supplied for close-fitted windows and/or French doors.

Standard window range comprises :-

- Pivot-hung opening windows (TVF windows)
- Side-hung opening windows (FES windows)
- Fixed frame, non-opening, windows (FL windows)
- Pivot-hung, opening roof lights

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- Glazing bars, mullions and leaded lights available as options for all designs
- Factory finished and/or aluminium clad windows and French doors available as optional extra
- Specially manufactured feature windows can be provided, if required

French Doors

- Insulated, outward opening pine doors, complete with triple glazed sealed units and draught sealing strips
- Door furniture, including door stay, and 'aluminium' coloured, lockable handles
- Locks suited with main entrance door supplied for some French doors. (Suffixed 'L' on floor plans)

Patio Doors

Triple glazed, sliding patio doors - supplied as standard for certain designs - available as option for all

INTERNAL SECOND FIX JOINERY

Internal Doors

- Panelled, white internal doors, pre-hung in frames, complete with thresholds, acoustic seals and profiled architraves as well as polished brass or aluminium hinges and furniture supplied as standard
- Polished or satin brass or aluminium finish handles supplied for all doors, with indicator locks for bathroom doors
- Glazed doors, where indicated on plans, fitted with clear, toughened glass
- Half hour fire doors, where required, supplied with frames fitted with intumescent sealing strips
- A variety of optional doors available from our extensive range, flush or panelled finished in pine, oak, beech
 or white lacquer see our separate Door Brochure
- Ledged and braced, oak or pine doors with traditional hinges and latches available as options

Window Sills

- Internal window sills supplied for all windows
- Factory finished windows sills to match windows, available as optional extra

LOFT LADDER AND ACCESS DOOR

Insulated loft hatch and retractable access ladder provided

INTERNAL MOULDINGS

- 145 mm high, profiled spruce skirting boards
- Profiled architraves to all doors

STAIRCASE

Natural pine staircase – Type Albert 8.14.3 - open or closed tread, supplied with all 2-storey designs. All staircases are supplied complete with balusters, handrails, newel posts and matching apron

- A variety of staircase designs and options are available on request
- Staircase timber options available include oak, ash, beech and pine
- Staircases can be supplied factory-finished (stained, varnished or painted) as an option and fitted with temporary tread protection,
- Optional turned balusters, handrails and newel posts available for all designs
- Ask to see our separate Staircase Brochure for ideas and inspiration

MECHANICAL VENTILATION SYSTEM

- Centrally controlled mechanical extract system, with outlets from kitchen, utility room and bathrooms, including extract unit, control unit, rigid spiro ducting and fittings with safe seals.
- Optional full ventilation and heat recovery system, with or without comfort cooling system, available as an option for all designs

SUNDRY ITEMS

• All nails, screws and fixings to assemble the above

OPTIONAL EXTRAS

For a complete list of additional optional materials and components available from our range, please refer to our Fact Sheet No. 5 – Optional Extras

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PRODUCT DATA SHEETS

In line with current safety regulations and EU directives, as well as with Section 6 of the Health & Safety at Work Act, 1974, Data Sheets on all products incorporated within Scandia-Hus' building sets are available from our office.

For further information with regard to the composition or properties of any materials or components incorporated within our building sets and their toxicological or ecological effects (if any), or in respect of the handling, storing, disposal, first aid, etc. of materials supplied by us, please contact our Technical Department who will be pleased to provide copies for your reference

FACT SHEETS

For further information, please refer also to our range of Fact Sheets, all of which are available on request :-

- Pre-Delivery Requirements (No. 18)
- Delivery Day & Shell Erection Programme and Arrangements (No. 14)
- Materials Delivery, Storage, Protection & Quantities (No. 16)
- Shell Erection Schedule (No. 13)
- Site Welfare (No. 15)
- Scaffolding (No. 17)
- Site Security (No. 19)

