

# THE SWEDISH HOUSE COMPANY

## SPECIFICATION OF COMPONENT MATERIALS

**APRIL 2008**

<b>THERMAL INSULATION</b>	<p><b>Walls:</b> 240mm (10in) thick Grade 'A' mineral wool factory fitted to external timber frame wall elements.</p> <p><b>Loft:</b> 405mm (16 in) thick Grade 'A' mineral wool for entire loft area supplied as loose fill.</p> <p><b>Roof Slope:</b> 270mm (11in) thick mineral wool Grade 'A' for sloping ceiling roofs supplied in batts to fit between trusses.</p> <p><b>Floor:</b> 120mm (5in) high density extruded polystyrene for entire ground floor area.</p> <p><i>All Chalet style dwellings will have fully insulated lofts providing warm, dry storage..</i></p>
<b>EXTERNAL WALL CONSTRUCTION</b>	<p>Prefabricated timber framed wall sections of full 2.4m (8ft) storey height, in lengths of up to 9 metres (30ft) jointed with steel wedges comprising from inside out:</p> <p>13.0mm (½ in) internal lining boards supplied loose.</p> <p>Protective polythene layer for transportation.</p> <p>45mm (2in) treated timber battens creating service cavity for electric cable runs</p> <p>45mm (2in) mineral wool insulation factory fitted.</p> <p>Polythene vapour barrier, factory fitted.</p> <p>195mm (8in) treated vertical timber studs at 600mm (2ft) centres.</p> <p>195mm (8in) mineral wool insulation factory fitted.</p> <p>12.5mm (½ in) plywood factory fitted.</p> <p>'Tyvek' or similar reinforced breather membrane factory fitted.</p> <p>45mm (2in) treated timber cavity closer battens factory fitted.</p> <p>Triple glazed windows and external doors all factory fitted.</p> <p>50mm (2in) ventilated cavity</p> <p><i>Masonry cladding by builder including associated lintels, stainless steel cavity ties and damp proof membranes.</i></p>
<b>INTERNAL WALL CONSTRUCTION</b>	<p>Loadbearing walls 120 to 170 mm (5in to 7in) thick pre-fabricated treated timber framework supplied with loose insulation, lining boards and screws.</p> <p>Non load-bearing walls 95mm(4'in) thick supplied in component form.</p>
<b>GABLE ENDS CHALET BUNGALOWS (1 ½ storey)</b>	As external walls above.
<b>SOUND INSULATION</b>	<p>70mm-95mm (3in-4in) mineral wool for all internal walls plus acoustic boarding.</p> <p>95mm (4in) for mid floor plus 25mm (1in.) Gypsum board</p>
<b>FLOORING</b>	<p>22mm (1in) thick moisture resistant tongued and grooved chipboard for all floors plus 0.2mm thick polythene vapour check membrane for ground floor.</p> <p><i>Many alternative flooring materials available.</i></p>
<b>CEILING LININGS</b>	<p>2 x 12.5mm (2 x ½ in) Gypsum board and screws supplied for all intermediate ceilings with 28mm x 70mm bearers for fitting at 400mm (1ft 4in) centres, creating service cavity above ceilings for cable runs etc. Single layer for top floor ceilings.</p> <p><i>16mm Pine or 14mm Spruce boarding available.</i></p>
<b>WALL LININGS</b>	<p>13mm (½ in) 'Duraline' or 'Fermacell' High density Wallboard and screws for all walls. <i>Many alternative boards available</i></p>
<b>WINDOWS</b>	<p>All windows are triple glazed with low 'e' glass and argon gas, high performance Grade 'A' fully reversible 'H' type pivot. Manufactured by 'Tanumsfonster AB' or similar and constructed of vacuum impregnated high density Nordic red pine. Factory finished décor stained frames with 'champagne' lockable handles by 'Hoppe' Brown glazing frames between panes and brown anodised external sills.</p> <p><i>Alternatives: Side hung casement windows and tilt and turn windows alu-clad.</i></p>
<b>FRENCH DOORS</b>	<p>Triple glazed construction as windows with espagnolette bolts and wind stay mechanism fitted with suited security locks.</p>
<b>PATIO DOORS</b>	<p>Sliding triple glazed laminated Nordic red pine framed doors with lift and glide mechanism.</p>
<b>WINDOW SILLS AND REVEALS (Internal)</b>	<p>Solid first quality virtually knot free Nordic red pine 110mm (4½in) deep. Supplied as sets with tongues for locating into rebated window frames.</p>
<b>ROOF WINDOWS</b>	<p>'Velux' Swedish specification double glazed with optimum cavity, argon gas filled, with insulating glass, 170 degree opening, treated redwood construction.</p> <p>External flashing sets to suit roofing material.</p>

<b>ROOF CONSTRUCTION*</b>	
<b>GENERAL</b>	Roof boarding for entire roof area in 22mm (1in) thick tongued & grooved whitewood sarking boards with "Tyvek Suprogrid" breathable membrane and counter battens on.....
<b>CHALET BUNGALOWS (1 ½ storey)</b>	Roof trusses generally made up with 42 x 270mm (2in x 11in) treated Nordic white spruce glue-laminated beam rafters: centres at 1200mm (4ft)
<b>BUNGALOWS AND TWO STOREY DWELLINGS</b>	Roof trusses are part assembled and made up with 45mm x 120mm to 220mm (2in x 5 to 9in)treated Nordic white spruce sections: centres at 1200mm (4ft) secured with galvanised mild steel angle brackets anchored to wall sections.
<b>MID FLOOR CONSTRUCTION*</b>	Nordic white spruce glue-laminated beam joists at 600mm (2ft) centres Generally 42 x 225mm (2in x 9in) with Nordic white spruce noggings. Part cassette construction.
<b>FASCIAS &amp; BARGEBOARDS</b>	2 no. 22 x 145mm (1in x 6in) treated Nordic white spruce boards and tilting fillets.
<b>EAVES SOFFITS*</b>	17mm tongued and grooved treated Nordic white spruce boarding.
<b>DORMERS</b>	Pre-constructed face and cheeks as external walls.
<b>DOORS EXTERNAL</b>	Main entrance door YD 273 by 'Snickar Per' 1m (3ft 3in) wide, Oak or teak faced internally and externally, supplied pre-fitted in wall section with SDP 73 Oak or teak faced sidelight where appropriate. Rear Entrance door YD 270 by 'Snickar Per' 900mm (2ft 8in) wide, Oak or teak faced, pre-fitted in wall section. All external doors outward opening unless specified otherwise by customer. All fitted with ASSA 2000 high security locks.
<b>DOORS INTERNAL</b>	Solid pine or Oak veneered 'Brage' doors with fielded panels supplied pre-hung in frames on quick release metal hinges and with locks pre-fitted. Manufactured by GK or similar approved. Doors are glazed where indicated (GL) on plans. Choice of door furniture. <i>Many alternative doors available.</i>
<b>STAIRCASE</b>	Heavy section pre-finished varnished laminated Nordic red pine. (Oak option available) Treads fitted with oak nosings providing shallow recess for carpet. Brass fixing bolts for handrails. All supplied for simple on-site assembly.
<b>LOFT HATCH</b>	Insulated and draught sealed lockable framed hatch with integral folding Nordic white spruce ladder.
<b>FINISHING TIMBERS (Skirting Boards, Architrave &amp; Cornice)</b>	First quality virtually knot free Nordic red pine supplied in rustic moulded sections generally 70mm (3in) deep. Architrave supplied in pre-cut lengths ready for on site mitre cutting by builder. (Oak option available)
<b>VENTILATION SYSTEM</b>	Whole house mechanical ventilation system, with heat recovery, including rigid spiral wound galvanised steel ductwork and self sealing fittings, extract vents to all wet rooms and fresh air vents to all habitable rooms <i>Systems up to 80% efficient</i>
<b>MISCELLANEOUS</b>	All beams and posts required for completion of the timber frame structure. All nails, screws and fixings, damp proof courses and membranes for completion of timber framed structure. All adhesives and neoprene sealing gaskets. Catwalk boarding for loft. Post box and 30 cm Dala Horse. SAP rating certification. Structural certification.
<b>TIMBER TREATMENT*</b>	All structural timbers, all external timber and the entire roof construction are supplied impregnated with Boron Basilit-B liquid preservative. Alternative treatments available.

#### 'U' Values

**Walls:** 0.169 W/m<sup>2</sup>K    **Roof:** 0.102 W/m<sup>2</sup>K    **Chalet Roof:** 0.136 W/m<sup>2</sup>K (0.099 W/m<sup>2</sup>/K possible)  
**Floor:** approx. 0.17 W/m<sup>2</sup>K Variable    **Windows:** 1.2 W/m<sup>2</sup>K av.    **Entrance Door:** 1.0 W/m<sup>2</sup>K