

Fact Sheet: Steel Poultry Housing



Structural steelwork

Bespoke steel portal frame designed to suit site location & altitude for best economy according to relevant British Standard codes of practice by Chartered Structural Engineer. Calculations for Building Warrant application (Scotland) available on request. Standard bay length: 20'.

Typical example: 62' wide Broiler Shed, 305x165 UB stanchions painted black, 254x146 UB rafters primed with red oxide at 16° roof pitch.

Enhanced eaves haunch length: 10% of total span, providing balance between economy & stability. Longer haunch increases stiffness, reducing ridge deflection & eaves sway, hence improving air-tightness.

Timber purlins

300mm deep purlins at 4' centres so that rolls of insulation fit tightly between them with no gaps.

Wall panels

100mm thick composite panels, white inside, juniper green outside, with polystyrene core. PIR (polyisocyanurate) core available on request: U-value 0.20W/m²K.

Foodsafe Laminate internal coating to panels & flashings available on request. (120micron thick chemically inert polymer film bonded to steel, resists moisture ingress & eliminates risk of toxic mould & bacterial growth.)

Double doors

Made from 100mm thick panels to match walls. Using the same thickness of panel for doors as the rest of the walls helps minimise any temperature differential caused by doors. Galvanised steel box section door framing.

Ceiling

1.2mm thick AG-TUF Corrugated PVC Liner Panel from PALRAM with corrugated foam polyethylene sealing strips fitted at ridge & eaves to close ends of ceiling sheets, in accordance with manufacturer's recommendations. Installation of closure strips improves air- & water-tightness & blocks entry of insects & small animals.

Increased number of fixings provided directly through ceiling into purlins giving robust line of fixings along each purlin. Lines of double-sided tape & mechanical stitchers up ceiling slope at joints between adjacent sheets prevent air leakage & reduce heat loss.

Roof insulation

250mm thick glass fibre wool between purlins: U-value 0.18W/m²K. 25mm thick polystyrene strips bonded to underside of steel rafters to prevent cold-bridging. 250mm wide strips of breather membrane top & bottom along steel rafters help prevent transmission of cold by direct contact with steel roof sheet.

Roof fan shafts

Fully trimmed openings for chimneys with 'peaks' faced in 12mm birch plywood to eliminate fan vibration & condensation issues.

ALL DESIGNS ARE BESPOKE & MAY BE TAILORED TO DIFFERENT SPANS, EAVES HEIGHTS ETC. TO SUIT ALL KINDS OF POULTRY HOUSING REQUIREMENTS.

43 Lisbane Road Kircubbin Co. Down BT22 1AW

Tel: +44 (0)28 4273 8327 Fax: +44(0)28 4273 8881 Mob: +44(0)7912 63 25 93 Email: info@jameskillen.co.uk

www.jameskillen.co.uk