

SPECIFICATION FOR A TWO-STALL ENGINE SHED AT KELSO.

The contract comprehends the following works, viz.,—The supply of all the material, labour, and the erection of the building complete in every respect, and, when finished, to level off and remove all extraneous soil and rubbish, so as to impart a neat appearance to the works; and generally to complete the contract to the full intent and meaning of the drawings and of this Specification, and to the entire satisfaction of the Engineer in charge, within _____ weeks of the date of the acceptance of the tender.

1. *Excavator*.—Excavate for foundations to a depth of at least two feet in the solid ground through all made earth; also excavate trenches for drain pipes, &c., and for all work necessary; and afterwards, when the foundations, drain pipes, and every other work are properly placed in position, to fill in well and ram round them the excavated earth and clay requisite, in layers not exceeding twelve inches in thickness at any part; each layer to be well wetted; and in this manner the entire surface excavated shall be brought up to the proper level requisite. The drain-pipes to be jointed and laid with well-worked clay.

2. *Carpenter*.—The piles shall not be less than 9 in. x 9 in. if square, or if not square shall have at least 81 square inches of heart-wood in their cross section; and if made of round timber, they shall be barked. The whole of the plates requiring mortising shall be neatly mortised right through a good fit to receive the tenons. All studs shall have tenons formed at both ends the full depth of the corresponding mortises, to be also a good fit, and secured therein each with two spikes of sufficient length, driven from the sides. Ground plates 4 in. x 6 in., well spiked with 9-inch spikes to piles; wall plates, 3 in. x 6 in.; angle studs, 6 in. x 6 in.; door studs, 6 in. x 6 in.; window studs, 6 in. x 3 in.; intermediate studs, 6 in. x 2 in.; diagonal bracing at sides, 6 in. x 1 in., to be well spiked to each intersected stud and plate, which must be cut out to receive them. Tie beams 9 in. x 4½ in., bolted to the double studs with two ½-inch bolts at each end. Purlins 6 in. x 4 in., fixed as shown. The doors at the ends of the building shall be constructed of two thicknesses of 1¼-inch diagonally laid planking, wrought, tongued and grooved, as shown; the edges to be sawn square. Each plank to be fastened from both sides to each intersected plank, with not less than two wire nails at opposite corners, well clinched. The planking of these doors to be well seasoned before being worked up. The doors at both ends shall run below upon cast-iron rollers with wrought-iron axles, mounted in wrought-iron carriages. One single and one double roller carriage shall be attached to each half of a door. The top of the doors shall have attached to them small sheave rollers, placed in a horizontal position, and shall run in a proper weathered guide attached to the building. One-half of each door shall be secured with a 12-inch barrel bolt, and the second half shall be attached to it with a proper wrought-iron hinged hasp and staple, with padlock which must be approved, and keys in duplicate. Cover the whole of the outside of the building with 8 in. x 1 in. wrought weatherboards, to lap 2 inches, each board to be securely nailed to every stud and bearing. The angles on both faces to be finished with 6 in. x 3 in. wrought stops, well nailed to studs. Provide and fix in sides of building solid framed windows of the sizes shown, glazed with 16-oz. sheet glass, in a workmanlike manner. A ledged and boarded door, 6 feet high and 2 feet 8 inches wide, to be hung in the side of the building, as shown, with stout T hinges and 8-inch Carpenter's patent rim lock, with keys in duplicate. The mode in which the eaves shall be constructed, also the construction and erection of four smoke funnels, hinges, gate-stops, tumblers, &c., are correctly shown on the detail drawings attached. The whole of the exterior boarding exposed to view to be wrought.

3. *Plumber*.—The roof shall be made of corrugated galvanized iron sheets, curved as shown, and shall be retained in position by means of wrought-iron clips (one clip to each width of sheet at the joints), and continuous bar at eaves, and 1-inch tie bolts intermediately. The sheets shall be of the best galvanized corrugated iron, No. 24 BWG., of BB. quality, with full double laps at sides, and held tightly together with galvanized iron screws with nuts and washers, spaced 12 inches apart; the ends of sheets to lap over each other not less than 12 inches, and to be rivetted together with galvanized-iron rivets and burrs through every other corrugation, and placed zigzag. To provide and fix to the eaves of roof proper 4-inch eaves guttering, and two stacks of 4-inch down spouting, all of galvanized iron, to be fixed to the gutter and building with all necessary holdfasts, junctions, bends, hopper-heads, &c., that may be necessary. Also flash with No. 9 zinc all door and window heads.

4. *Painter*.—The whole of the exterior of the building to be properly prepared and stopped, and painted three coats in the very best linseed oil and white lead, to finish white. The doors, angle stops, and barge-boards, to be finished a warm stone colour. Sufficient notice must be given to the Engineer by the Contractor prior to the laying on of any of the three coats. The whole of the wrought-ironwork to have two coats of oil black. Paint in 10-inch block letters in black, at both ends above doors, the words "Engine Shed."

5. *Materials*.—The piles to be of totara, matai, black birch, hinau, or puriri. The ground plates to be of totara. The remainder of the framing and boarding may be rimu, matai, or kauri. All the timber used shall be straight and sound, free from shakes, large or loose knots, and other imperfections; and each side of any scantling shall show nowhere less than ¾-heart. All spikes used in this contract shall be of such a length as that after being driven through the first timber they shall enter the second timber at least one half of their entire length previous to punching; and all nails shall be in length equal to 2½ times the thickness of the first timber through which they are driven. In weatherboard nails, the thickness of the second weatherboard must be added to their length.