

SWEDISH TIMBER HOUSES
ERECTION MANUAL



TYPE A
ENGLISH RURAL

SEPTEMBER 1945

MINISTRY OF W

ERECTOR MANUAL

SWEDISH TIMBER HOUSES

TYPE A - ENGLISH RURAL

GENERAL

The house is a two-storey, three bedroom type with a single storey outbuilding attached. It is intended for erection as a pair of semi-detached houses.

The materials supplied by Sweden comprise:-

- 1) Prefabricated walls and partition panels complete with doors, windows and ironmongery.
- 2) Floor and ceiling joists, keel plates and rafters cut to length notched and checked.
- 3) Floor and roof boarding in falling lengths.
- 4) Staircase and balustrades.
- 5) Architraves (cut to approx. lengths) skirtings and other trimming in falling lengths.

The full list of materials supplied by Sweden is set out in a Schedule of Parts which also details the code marking applicable to each part, to which reference is made in this manual and the erection drawings.

The parts will be erected upon foundations and between brick party walls, chimney stacks, etc. previously erected; due provision has been made for the necessary trimming of joists and rafters round hearths and chimneys.

The following instructions relate only to the erection of timber portion of the house and do not cover foundations, brickwork, roof battens and covering, (e.g. Tiles), drainage, paths or fences.

The instructions are given in detail for the left-hand house of a pair (viewed from front). They are, however, equally applicable to the right-hand counterpart. It is desirable that the right-hand house should be erected concurrently with or immediately following the left-hand house and that first floor wall panels of one house should not be set up before the wall-plates (at first floor level) of second house are fixed.

Similarly the rafters of house No.1 should not be erected before laying the ceiling wall plates of house No.2.

The drawings and diagrams to be referred to with this Manual are as follows:-

Drawings
and
Diagrams

Erection Drawings

- A1 Plan of ground floor construction
- A2 Plan of ground floor wall panels
- A3 Plan of first floor construction
- A4 Plan of first floor wall panels
- A5 Plan of first floor ceiling
- A6 Plan of roof construction
- A7 Section through house
- A8 Front elevation of house
- A9 Rear elevation of house
- A10 Gable end elevation
- A11 Staircase details
- A12 " " "

- G13 Details of eaves and verges to outbuildings
- G1 Details of ground floor construction
- G2 Details of ground and first floor wall construction
- G3 Details of junction of wall panels with first floor
- G4 " " " " " " " " " " " "
- G5 Details of junction of outbuilding roof and first floor with gable wall.
- G6 Details of bay window roof and outbuilding walls
- G7 Details of bay window and porch
- G8 Details of windows and junction of outer wall panels with party wall.
- G9 Details of junction of outer wall panels with party wall.
- G10 Details of junction of wall panels with first floor ceiling.
- G11 Details of eaves and verge to main roof.
- G12 Details of wall panel construction.

Diagrams

- 1 to 6 Axonometrics showing progressive stages of erection.
- 7 and 8 Diagrams of stages in wall panel assembly.

Coding

As previously mentioned a detailed list of parts to be supplied by Sweden is provided, each part being given a distinctive code mark which is stamped upon it.

The full code-marking is built up as follows:-

- 1) Type of house (e.g. A)
- 2) Identification number of house (e.g. 863)
- 3) Right or left-hand (e.g. L)
- 4) Group number of part (e.g. ground floor construction, comprising G.S. keel plates, joists, trimmers, etc. Group 1).
- 5) Identity number of individual part within the group (e.g. trimmer under bay window 14).

The code mark for this unit will therefore be A 863 L 1 -14.

In the case of a large number of interchangeable units such as floor joists of equal lengths the same identity number is given to all but a different number would be applied to other joists of different lengths.

Certain units such as rafters, joists, floor-beams, architraves, etc. may be delivered in bundles. Component parts of bundles will be shown grouped on Schedule of Parts. When material is delivered to the site it is advisable to make an immediate check with the schedule of parts to ensure that a complete set of components has been delivered.

Stacking

In organizing each job it is suggested that careful attention be given to the stacking of components on the site. Direction will be facilitated if the different parts are located as near as possible to their final position in the building, and in relation to the order of their use. All components should be stacked on dunnage and protected with tarpaulins.

The order of materials as given in the Schedule of Parts will correspond approximately with the order in which they are required for erection i.e. keel-plates and ground floor joists first, ground floor wall panels next and so on.

Doors

Internal doors should be lifted from the hinges and stored under cover until the house is nearly complete.

- G13 Details of eaves and verges to outbuildings
- G1 Details of ground floor construction
- G2 Details of ground and first floor wall construction
- G3 Details of junction of wall panels with first floor
- G4 " " " " " " " " " " " "
- G5 Details of junction of outbuilding roof and first floor with gable wall.
- G6 Details of bay window roof and outbuilding walls
- G7 Details of bay window and porch
- G8 Details of windows and junction of outer wall panels with party wall.
- G9 Details of junction of outer wall panels with party wall.
- G10 Details of junction of wall panels with first floor ceiling.
- G11 Details of eaves and verge to main roof.
- G12 Details of wall panel construction.

Diagrams

- 1 to 5 Axonometrics showing progressive stages of erection.
- 7 and 8 Diagrams of stages in wall panel assembly.

Coding

As previously mentioned a detailed list of parts to be supplied by Sweden is provided, each part being given a distinctive code mark which is stamped upon it.

The full code-marking is built up as follows:-

- 1) Type of house (e.g. A)
- 2) Identification number of house (e.g. 863)
- 3) Right or left-hand (e.g. L)
- 4) Group number of part (e.g. ground floor construction, comprising C.P. keel plates, joists, trimmers, etc. Group 1).
- 5) Identity number of individual part within the group (e.g. trimmer under bay window 14).

The code mark for this unit will therefore be A 863 L 1 -14.

In the case of a large number of interchangeable units such as floor joists of equal lengths the same identity number is given to all but a different number would be applied to other joists of different length.

Certain units such as rafters, joists, floor-boards, architraves, etc. may be delivered in bundles. Component parts of bundles will be shown grouped on schedule of parts. When material is delivered to the site it is advisable to make an immediate check with the schedule of parts to ensure that a complete set of components has been delivered.

Stacking

In organizing each job it is suggested that careful attention be given to the stacking of components on the site. Erection will be facilitated if the different parts are located as near as possible to their final position in the building, and in relation to the order of their use. All components should be stacked on dunnage and protected with tarpulins.

The order of materials as given in the schedule of parts will correspond approximately with the order in which they are required for erection i.e. keel-plates and ground floor joists first, ground floor wall panels next and so on.

Storage

Internal doors should be lifted from the hinges and stored under cover until the house is nearly complete.

/s/ J. J. J.

Joints between panels and posts are to be made as follows:-

- 1) Remove temporary protecting laths and open out folded edges of paper sheathing.
- 2) Repeat operation on opposite sides of panel.
- 3) Skew-nail internally with 2" wire nails located in pairs at 2' centres vertically.
- 4) Tack additional strips of impregnated paper over lapped paper joints externally.
- 5) Cover fillets as shown in diagram No.8 to be fitted into grooves internally and externally over the lapped paper joints, secured with No.2 2 1/2" galvanised nails at the same vertical centres as for boarded lining to panels.

Operations 4) and 5) may be deferred until final adjustments to wall panels have been made.

Erection of
ground floor
panels

Select external wall panels and corner posts for main building from stacks and lay on floor joists in position ready for erection.

Commence with panel L 2-20, fit around end of party wall and support by strut as shown in diagram No. 2. Next raise panel 2-7 and skew-nail to L 2-20.

Panel 2-6 is then erected, skew-nailed and supported internally and externally by timber struts as illustrated.

Erect panel 2-5, angle post 2-4 and right-hand panel of bay window 6-7, skew-nailing into position.

Locate corner post 2-19 at angle of building and erect together with the two adjoining wall panels 2-1 and 2-18. Secure with temporary stay fixed across tops of panel (see diagram No. 2).

The angle post 2-2 is now erected followed by left-hand panel of bay window 6-1. The two angle posts 6-2 and 6-5 together with front panel of bay window 6-4, follow, and are skew-nailed into position. Then fix angle cover fillets 6-3 and 6-6.

Beam 2-3 should now be fitted into top of angle posts 2-2 and -4 and fixed by No.3 2 1/2" nails at each end.

Panels 2-17, -16, -15 and -14 should be erected next and nailed. Panels 2-16 and 4-2 (including junction post 4-1) should be erected together to provide stiffening.

Corner post 2-21 should then be erected together with panel 2-13 and nailed. Angle panels should be temporarily tied at top as previously described.

Panels 2-12, -11, -10 and -9 follow, internal and external struts being provided to 2-11. Next fit panel R 2-20 (of right-hand house) around end of party wall and strut.

Finally insert panel 2-8 and nail to adjoining panels.

If required cut weather-boarding at bottom of panels 2-8 and -10 to avoid woodwork butting against concrete slab under patch.

/Spine-wall

Spine-wall

The internal spine-wall panels should now be erected on the width of floor beams previously described.

Spike junction post 4-1 to party wall and erect panels 4-10, -9, -8, junction post 7, panels 4-8, -5, -4 and -3 in order, skew-nailing together as before. Strut panel 4-6 temporarily to floor joists.

Check position, alignment and plumb of spine wall, then skew-nail bottom frame to ground floor joists using No.2 3" nails at each alternate joint.

FIRST FLOOR CONSTRUCTION

Wall plates

The first floor wall plates may now be laid. In doing so care must be taken to see that the lower wall panels are properly aligned and plumb. Remove temporary angle stays as required, but retain all raking struts.

Commence by laying wall plate section 7-2, followed by 7-1, -3, -4, -5 and -6. Next fix the two spine wall sections 7-8 and -7.

Fix plates to wall panels with 5" nails at 3' centres. At all halved joints No.2 5" nails are to be used.

First floor Joists

The first floor joists should now be laid. These are located by spacer pieces fixed to wall plates and may be laid in the most convenient order. Skew-nail ends of joists to wall plates with 3" nails as for ground floor.

Additionally, ends of every third joist are to be tied to wall plate with metal straps 19-2.

Select trimmers and trimming joists and secure to supporting members by means of the metal straps provided.

Ends of joists abutting over spine wall to be spliced as described for ground floor; (splices 11-2).

Length of 1" floor boarding to be laid along line of first floor spine wall as previously described.

2" noggling pieces 11-4 to be inserted between joists where shown on erection drawings to secure top of partition.

OUTBUILDING

Keel-plates

At this stage lay keel-plates of outbuilding. Select units 1-32, -33 and -34 and lay along outer wall line. Follow with internal plates 1-36, -39, -35, -37 and -38 and set on raised concrete curbs. Check dimensions alignment and level and see that plates are laid truly square. Check projection of 1/4" over outer foundation walls. After checking nail halved joints with No.4 2" nails.

Outer wall panels

Remove temporary batten in main wall panel 2-18 open out flaps of impregnated paper, insert junction post 3-12 and nail to frame of panel 2-18 (see diagram 7).

Thereafter erect and fit panels 3-3, -2 and -1, corner post 3-11 and adjoining panel 3-10. Provide and fix angle stays at top as before described.

Now fix junction post 3-13 to main wall panel 2-14 and erect panels 3-4, -5 and -6, corner post 3-14 and panel 3-7. Stay angle. Follow with panels 3-8 and 3-9, together with 5-2 to provide stiffening. Form junction between panels as before described.

/all plates

Wall Plates

Next lay wall plate units 10-26 and -27 along top of wall panels (after checking that the latter are correctly aligned and plumb) and fix to panel tops with 5" nails at 3' centres. Angle stays to be removed during this operation.

Ceiling Joists

Ceiling joists located by spacing fillers on wall plates may now be laid. Skew nail ends to plates as before. Nail joint at small gable with No.2 4" nails to each panel joint.

Internal Partition Panels

Internal wall panels to outbuilding should now be set up. First nail junction post No.5-1 to panels 5-1 and -2. Erect panels 5-5, 5-4 and 5-3, skew nail junctions and fix filler strips 5-12 and 5-13.

Next fix junction post 5-1 to wall panel 2-17 erect panels 5-6 and 7.

Finally, set up panels 5-11, -8, junction post 5-1 and panels 5-9 and 5-10.

Check that inner partitions are plumb and truly aligned and skew nail to joists.

BAY WINDOW AND PORCH

Fix plate No.6-8 to outside of beam 2-3. See that underside of plate is flush with that of beam and secure with No.6 5" nails. Then hoist roof of bay window set in position and skew nail to beam and window heads. Fix cornice mould 6-10, -11 and -12 around head of window and nail to framing of roof. Roof of porch should be fixed in similar manner, the roof being strutted temporarily until corner posts 6-14 and -15 are positioned and fixed.

Erect porch panels 6-20 and fix to post 6-15 and panel R 2-20. Then fix ballustrade panel 6-19 to post 6-15 and dowel outer end to porch floor. Fix in position seat 6-21 securing to wall panel 2-8 and ballustrade panel 6-19.

Flashings

Cover flashings over bay window and porch to be supplied by Erection Contractor, and fixed before first floor panels are erected.

FIRST FLOOR WALL AND CEILING CONSTRUCTION

Select panels for first floor outer and spine walls, hoist and lay on first floor joists in positions convenient for erection.

The panels can be hoisted by hand without special tackle, but it may be of assistance to make use of a simple slide consisting of a short ladder or pair of smooth planks, as indicated on diagram No.3

First erect wall panel L 8-17, fit around end of party wall and lap over top of panel below, supporting temporarily by short lengths of wood spiked to both sides of party wall and to top of panel (see diagram No.4). Nail projecting weather-boarding at bottom to top of lower panel, also skew nail to end of wall plate.

Next erect panel 8-5 and fix to panel L 8-17 as previously described.

Continue with units 8-4, -3, -2, -1 corner post 8-16 and panel 8-15. Panel 8-5 to be strutted internally to floor joists; temporary stay to be fixed at top of angle panels as for ground floor.

Panels 8-14, -13 and -12 should be erected next. Panels 8-13 and 9-2 (including junction post 9-1) should be erected together.

Set up corner post 8-18 followed by panels 8-11, -10, -9, -8 and -7. Strut panel 8-8 internally and fix stays to corners.

Next fit panel R 8-17 (of right-hand house) around end of party wall, secure temporarily to wall as previously described and finally insert and fix panel 8-6.

Before erecting each section it is advisable to nail short lengths of boarding to inside of panels near top to prevent them falling outwards.

Spine wall
panels

Commence the erection of first floor spine wall panels. Begin by fixing junction post 9-1 to brick party wall. Then erect units 9-2, -3, -4, -5, -6 and -7, strutting temporarily panel 9-2 to floor joists.

Upper wall plates should now be laid. Begin with section 10-2 followed by 10-1, -3, -4, -5 and -6. Plates to be jointed and fixed as previously described.

Ceiling joists

Next lay ceiling joists (located by spacing fillets on wall plates). Skew nail ends to plates as before. Select trimmers and trimming joists and secure to supporting members with metal straps provided.

Ends of joists abutting over spine wall to be tied with short length of splicing battens lark 11-3 nailed to both sides with 3" nails, No.2 to each side.

Next nail 4" x 1" diagonal bracing strips 15-3 at 3'0" centres to top of joists. (Note: this bracing must be kept 1'0" clear of ends of every second joist to avoid feet of rafters.) Fix with No.2 3" nails at each crossing of board and joists.

Insert 2" noggling pieces, mark 11-4 between joists (as indicated on erection drawing No.A5) to which tops of partition panels will later be secured.

Gable wall
panels

Hoist gable panels through rafters before all 4" x 1" diagonal braces are fixed. Commence by erecting panel 12-3 and strut temporarily to ceiling joists. (Top of struts to be kept 9" down from upper edge of panels).

Next raise panel 12-2 at side of chimney and slide into position behind chimney stack. Nail through side of frame to previous panel. Then erect unit 12-1, strutting as before.

To facilitate location of gable panel 12-2 a raking timber guide should be spiked to top of panel 12-3 and through blocking piece to top of first floor corner post 8-18 (see diagram 6).

Nail rafters 13-1 against gable panels flush with raking tops with No.2 4" nails at each joint and at ridge and spike feet to ends of joists.

ROOF CONSTRUCTION

Main Building
Trusses

Form trusses to main roof with pre-cut rafters 13-1 and built-up ties 13-2. Ends of ties should be fitted around rafters, locating by means of marks thereon, and spiked with No.4 4" nails at each joint. Nails should be clenched. Secure halved joint at ridge with No. 4 3" nails.

It may be found convenient to construct trusses on the ground. They can readily be hoisted on to first floor ceiling joists prior to erection (see diagram No.6). Alternatively a temporary ridge plate may be erected and the trusses built in situ.

Commence by erecting truss nearest to gable end. If pre-built, feet of truss should be placed against ends of joists upon which it will finally rest. Raise truss into vertical position and lift feet of rafters on to ends of joists. Tie to gable end rafters with short lengths of boarding and spike feet to ends of joists with No.1 6" nail.

/Select

STAIRCASE

Set up staircase 18-1 in position with head of stringers bearing against face of ^{joist}trimming and with feet resting upon ground floor boards. Spike outer string to trimmer with 3" nails and also through trimming joists into head of stringer.

Inner string to be nailed (on underside of stair) through blocking pieces to wall panel.

Fix upper balustrade panel 18-2 by screwing attached newel post to side of trimmer. The lower balustrade panel 18-3 with newel post should be screwed to outside of stringer and nailed through 3" x 3/4" fillet marked 18-10. Fluted side panels 18-4 and capping pieces 18-5 should be fixed to newel posts.

Fixing of upper balustrade panel and newel should be deferred until after hardboard wall lining has been fixed, but must precede fixing of ceiling lining to ground floor.

Fixing of lower balustrade panel and newel post must be deferred until after the 3" x 3/4" fillets 18-10 are fixed.

Fix 4" x 1" capping 18-6 against outer wall on blocking pieces 18-7 followed by 3/4" lining 18-8 nailed to blocking pieces and wall plate.

Raking capping piece 18-9 should be fixed after wall and ceiling lining is completed.

3" x 3/4" fillet 18-10 should be fixed to underside of trimmer after ceiling lining is fixed, and returned under bulk head.

Similar length of fillet to be attached to wall panel 4-17 to receive upper end of balustrade panel.

GROUND FLOOR PARTITIONS

Fix vertical junction post 4-1 against wall panel 2-5 and 4-7 with 3" nails at 2'0" vertical centres. Then erect partition panels 4-11, -12 and -13 and -14. Skew-nail together with 2" nails. Check that partition is correctly positioned, aligned and vertical. Then secure at head by nailing through nogging pieces and at feet by skew-nailing to floor boarding.

Next erect panel 4-17, followed by 4-18 which should be nailed to joist at top. Then erect panels 4-15 and -16. All panels to be skew-nailed to floor and to each other.

Place triangular wall panel 18-11 at side of stair in larder. Nail to underside of joist, to stringer and to wall.

Nail loose battens 4-19 and -20 to both sides of partition joints to main building and battens 5-12 and -13 to outbuilding with 2" nails at same centres as for inner lining boards.

FIRST FLOOR BOARDING

Remove struts to wall panels on first floor and lay 1" boarding as described for ground floor.

Trim floor boarding around hearths and staircase well. Offer up balustrade panel 18-2, scribe for and cut opening in floor boarding to take newel post.

Lay floor boards in roof space where required (16-2).

Engineering
Services

Installation of engineering and plumbing services must be carefully organized and timed to suit house erection programme;

For instance, services located below ground floor must be run before floor boarding is laid, but any delay in laying floor boardings will in turn hold up erection of cross partitions, staircases, etc.

Unless, therefore, engineering work proceeds in step with the general sequence of operations as laid down in this manual, considerable delay will result.

It is suggested that engineers should enter the house whilst carpenters are working on the roof construction, and should run all necessary service lines below ground floor joists. Meanwhile, drilling of $\frac{1}{2}$ " diameter holes at mid-depth of first floor joists for electric cabling should be done.

Engineering services in first floor and roof space should then be proceeded with in turn, immediately followed by carpenters in laying ground and first floor boarding, erecting partitions and other consequent work.

CEILINGS. $\frac{1}{2}$ " insulation board in 3'0" wide sheets (Joists at 18" centres). Bundles and crates should be opened and the boards thoroughly aired by standing round the rooms for at least 48 hours before fixing. Boards can be cut to size either before or after airing.

Nailing. For intermediate joists $\frac{1}{2}$ " galvanised panel pins. For edges either $\frac{1}{2}$ " galvanised panel pins or clout nails. The board should be fixed first to the centre joists, nailing to start in the middle of the sheet and working outwards, the nails to be driven at alternating angles spaced at 8" centres. The nails round the edges of the board should be 6" apart.

Cover Strips. All joints to be covered with corrugated fibre strip. (Anaglypta or other approved) with large central corrugations. Cover strips supplied with boards.

GENERALLY.

Wherever possible plaster to brick walls should be finished before fixing ceilings or wall linings. If this is not possible care should be taken to prevent adhesion between the plaster and the boards by means of a trowel cut. If this is not done cracking is bound to occur.

Wood Moulds and Cover Fillets (Timber). The following items are supplied by Sweden:-

Cornice cover fillets.
Internal vertical angles, cover fillet.
Skirtings.
Architraves to doors and windows.

The following items are supplied by M.O.W.:-

Picture rails.
External angles, cover fillets.

All the above are supplied in random lengths and are to be cut, (mitred where necessary), fitted and fixed by the Erection Contractor on site. Fixed with $\frac{1}{2}$ " galvanised nails punched and filled.

Nails. All nails for fixing Hardboard and Fibreboard will be supplied with the boards.

All nails for fixing the timber cover fillets and moulds, (except for architraves and skirtings), are to be supplied by the Erection Contractor.

Finishing. In rubbing down Hardboard after its erection, if water is used it should be as sparingly as possible.

Note: Hardboard may be worked in a similar manner to timber, that is by drilling, sanding, planing, bevelling, etc.

APPENDIX No. 2

Details for Erecting and Fixing Cupboards, Draining Boards and Shelving.

HOUSE TYPE A.

GENERAL

The drawing to be referred to with this Appendix is Drawing No. 7080/9

All fixing battens, friezes, scribing pieces and cover fillets appropriate to a particular fitment in a particular position are shown by the code mark on the Drawing 7080/9. Some finishing members are supplied with the actual fitment, others are supplied in a bundle intended to serve one house. For details see coding schedule.

All timber which it is intended shall be painted in knotted and primed - all other members have been left in the white.

On completion of painting the "D" handles (KK.10) shall be bolted in the holes drilled in doors and drawers, with washers at front and back. The bolt shall be cut off without burr flush with nut.

DRESSER D.

Fix top cupboard (TG.14) through end and top to wall and ceiling respectively and through bottom to supporting batten (TG.15) previously fixed to wall.

Fit and fix scribing pieces (TX.18)

Fix bottom cupboard (TG.11) to wall and floor through end and plinth.

Fix and fix skirting (TG.12 and TG.13).

WARDROBE E For bedroom No.1.

Fix wardrobe (TH.10) in position.

Fit and fix battens (TX.49) and fit and fix frieze (TX.38) and cover fillets (TX.13).

WARDROBE E For Bedroom No.2.

Fix wardrobes (TH.10) together in position.

Fit and fix battens (TX.50) and TX.51) and fit and fix frieze (TX.39) and cover fillets (TX.19)

WARDROBE F.

Fix wardrobe (TP.10) to bulkhead through bottom and to wall through back.

Fix battens (TX.54 and TX.55). Fit and fix frieze (TX.33) and cover fillet (TX.31) to battens and wardrobe.

Fix and fix cover fillet (TX.10 and TX.11)

METER CUPBOARD G (For left hand house)

Screen cupboard (TS.10) to walls through screw holes provided.

Fit and fix cover fillets (TX.14 and T.X.17)

METER CUPBOARD G (For right hand house)

Screen cupboard (TT.10) to wall through screw holes provided.

Fit and fix cover fillets (TX.14 and TX.17)

DEY GOODS AND BROOM CUPBOARD K.

Assemble cupboard in accordance with drawing pasted on the underside of a carcass bottom.

Slide cupboard between walls and fix in position.

Fix battens (TX.47 and TX.48) in line with cupboard.

Fit and fix frieze (TX.36 and TX.37)

Fit and fix cover fillets (TX.13, TX.28 and TX.34) completing with TX.30.

LINEN CUPBOARD L. In bedroom No.2

Fix cupboard (TL.10) in position hard against chimney breast.

Fix battens (TX.52 and TX.53)

Fit and fix frieze (TX.40) and cover fillets (TX.19 and TX.33)

CUPBOARD FRONT N.

Fix wall bearers (TM.17) strongly to wall to take cylinder at the height shown on fixing sheet after the cross bearers (TM.18) and the slatted shelf (TM.14) have been fixed.

Fix bearers (TM.15 and TM.16) to wall to take bottom (TM.12) and shelf (TM.13) both of which should be fixed in position.

The cupboard front (TM.11) should then be fixed (to suit plumbers) and cover fillets (TX.11 and TX.12) fitted and fixed.

CUPBOARD FRONT O

Fix side bearers (TP.14 and TP.16) and top and bottom back bearers (TP.13) to take top (TP.12) and bottom (TP.12) and the 4 shelves (TP.15), all shall be fixed in the positions as indicated on the fixing sheet.

The cupboard front (TP.11) should then be fixed and cover fillets (TX.15 and TX.16) fitted and securely fixed in position.

DRAINING BOARDS General

The tenons on the centre back rail and the mortices in the draining boards, together with the bottom edges of the back and end risers shall be treated with a suitable mastic.

DRAINING BOARD For scullery (in lefthand house)

Fix battens (TU.17 and TU.18) to walls. Bore holes in centre back rail (TU.13) to take water service pipes.

Fit and bed to sink draining boards (TU.11 and TU.12) and centre back rail with a suitable mastic and screw down to wall battens.

Fit risers (TU.14 and TU.15) to suit window opening and fix. Fit and fix end risers (TU.16)

DRAINING BOARD For scullery (in right hand house)

Fix battens (TU.17 and TU.18) to walls. Bore holes in centre back rail (TU.13) to take water service pipes.

Fit and bed to sink draining boards (TV.11 and TV.12) and centre back rail in suitable mastic and screw down to wall battens.

Fit risers (TU.14 and TV.13) to suit window opening and fix. Fit and fix end risers (TU.16)

DRAINING BOARD For washhouses

Fix battens (TU.17 and TW.15) to walls. Bore holes in centre back rail (TU.13) to take water service pipes.

Fit and bed to sink draining boards (TW.11 and TW.12) and centre back rail with a suitable mastic and screw down to wall battens.

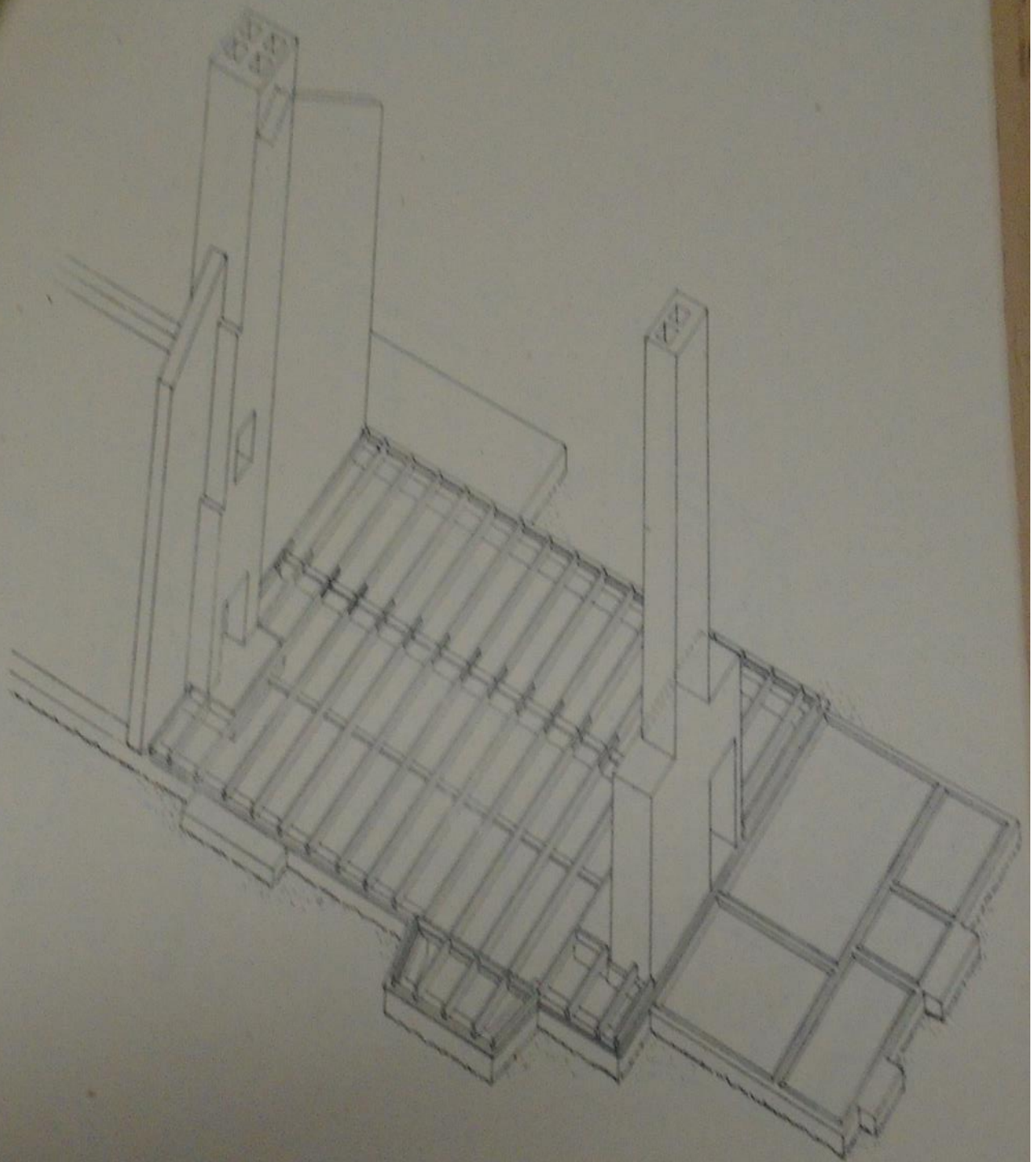
Fit and fix risers (TW.13 and TW.14)

CUPBOARD SHELVING in Larder

Fix shelf bearers (WU.13 and WU.14) at the heights and positions indicated on the fixing sheet.

Fix cross bearers (WU.15) to shelf bearers (WU.14)

Fit and fix shelves (WU.11 and WU.12) as indicated.



TH/O95

DIAGRAM I

Ⓐ

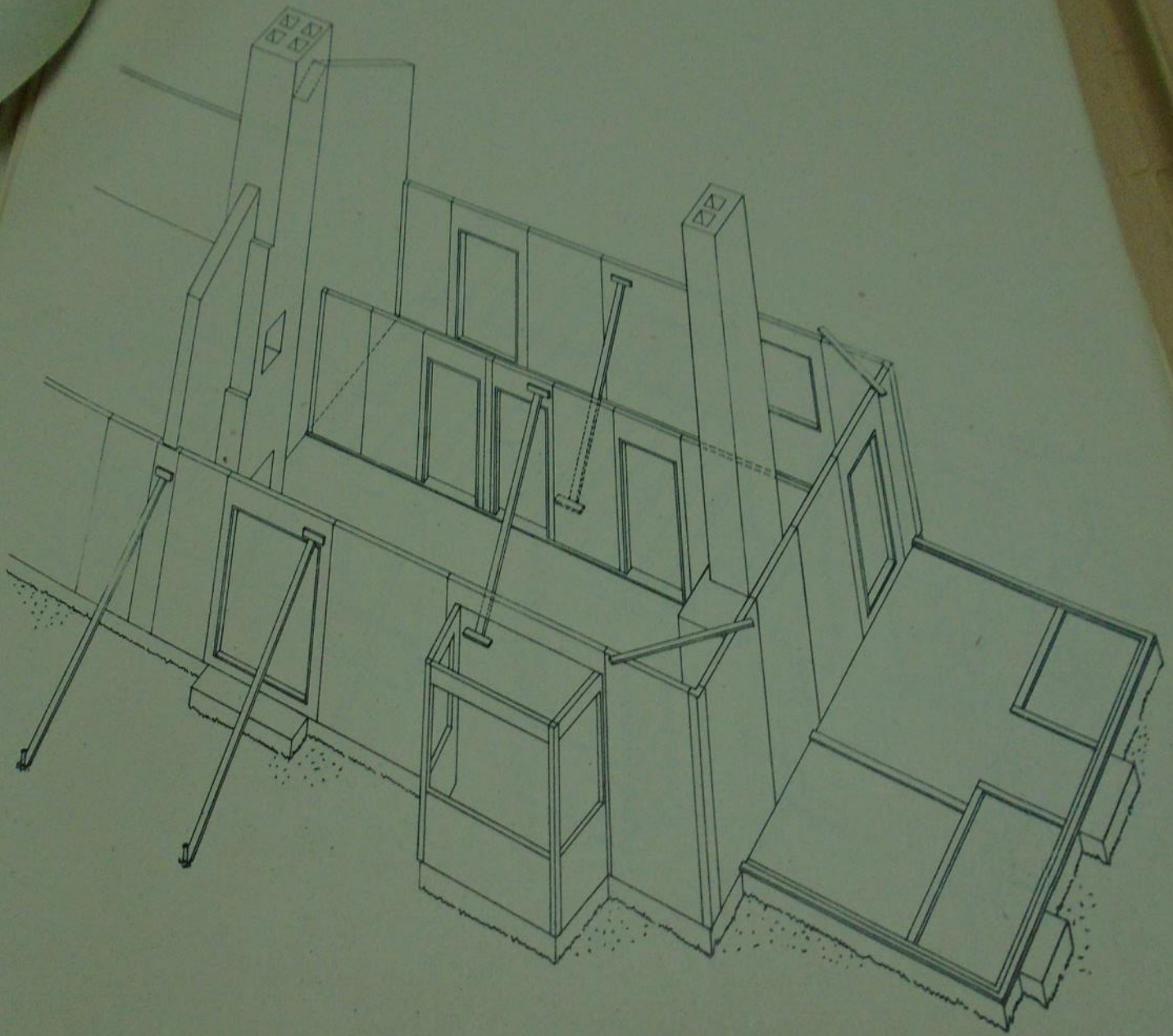
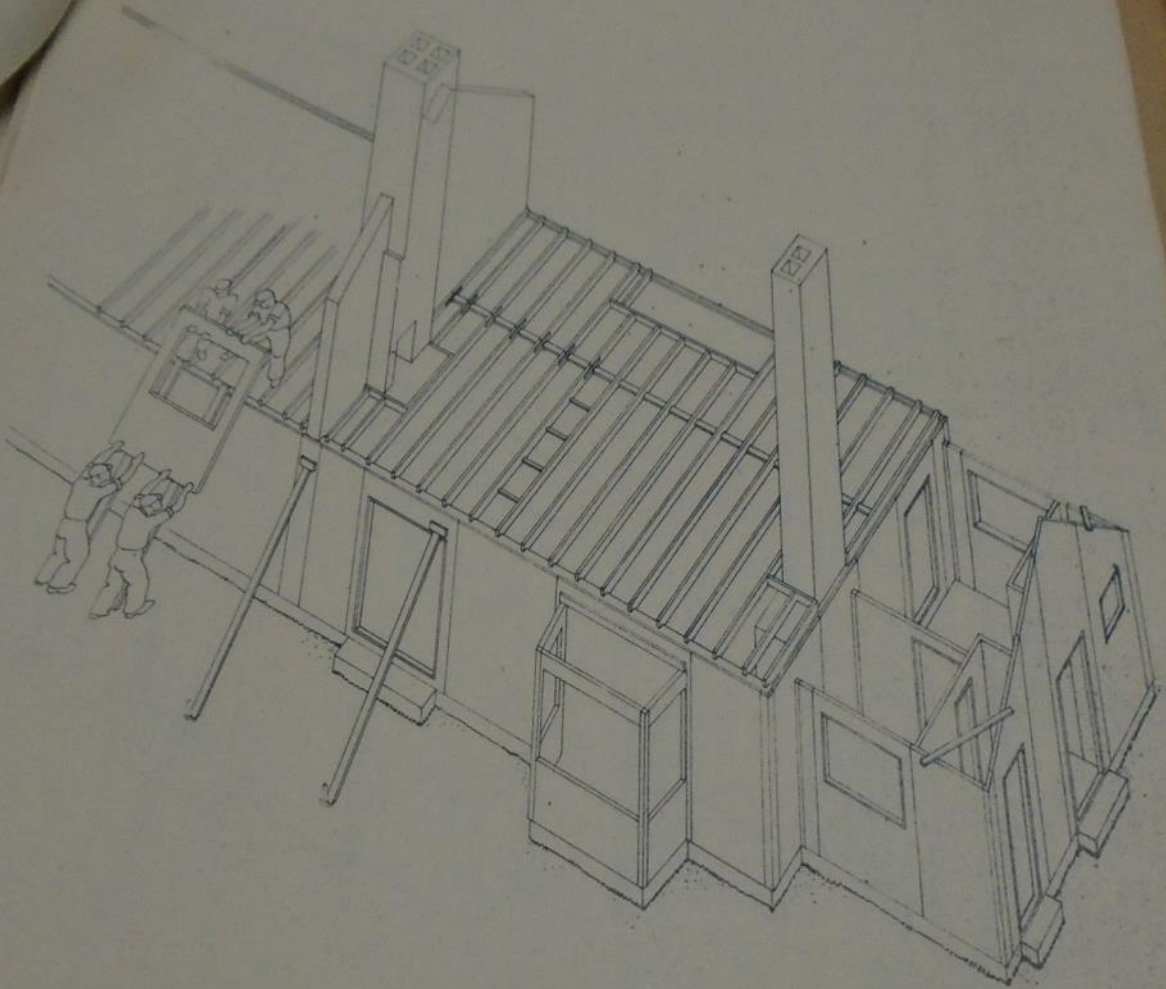


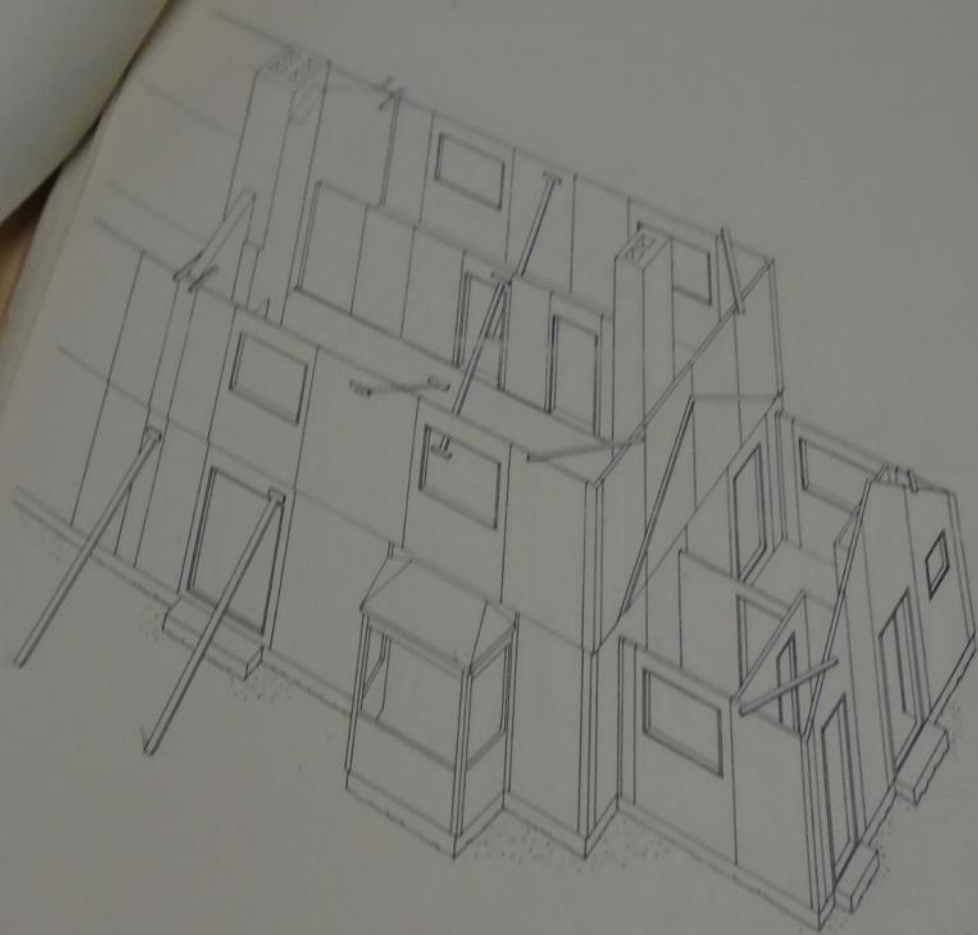
DIAGRAM 2



98

DIAGRAM 3

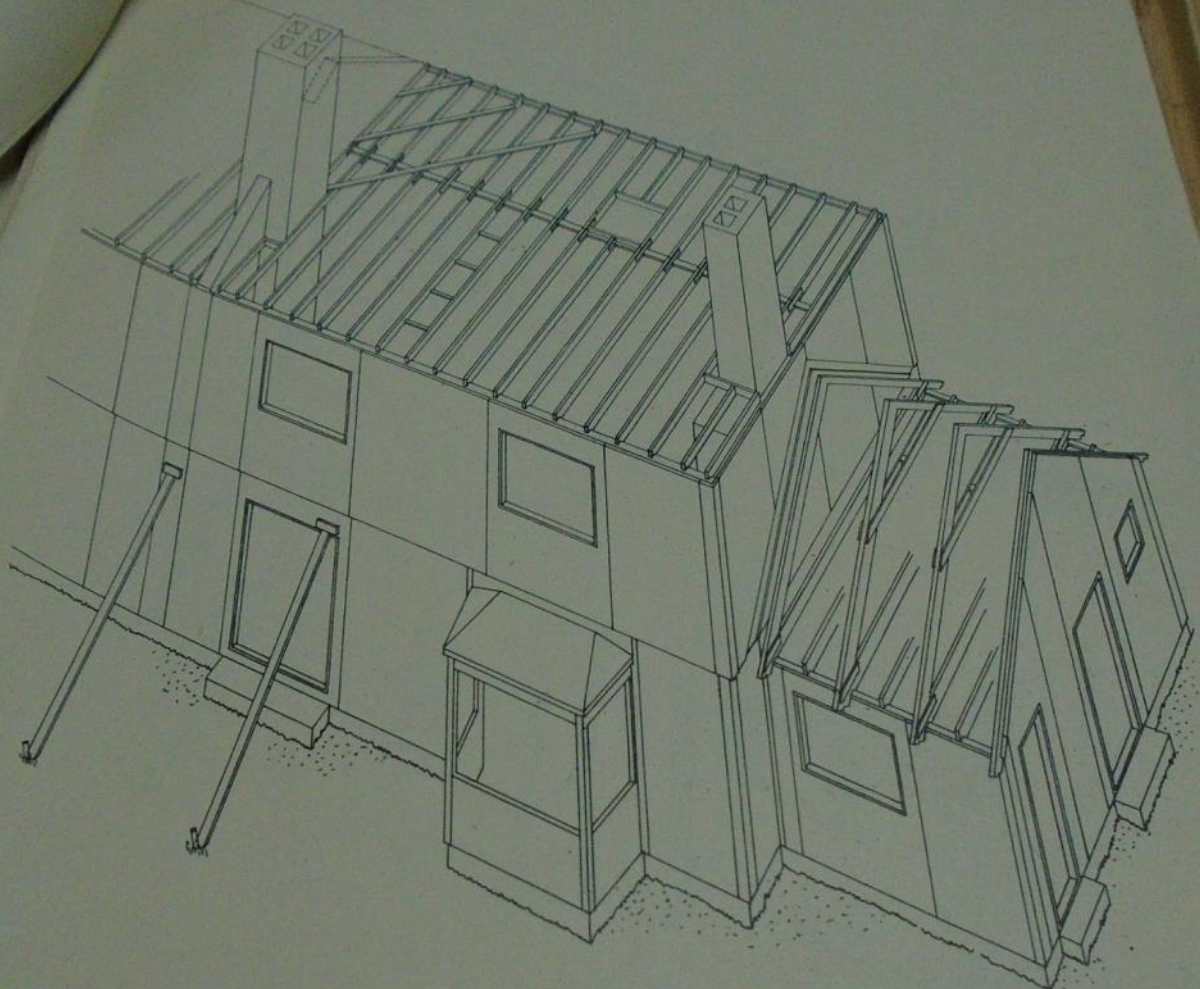
Ⓐ



TH/096

DIAGRAM 4

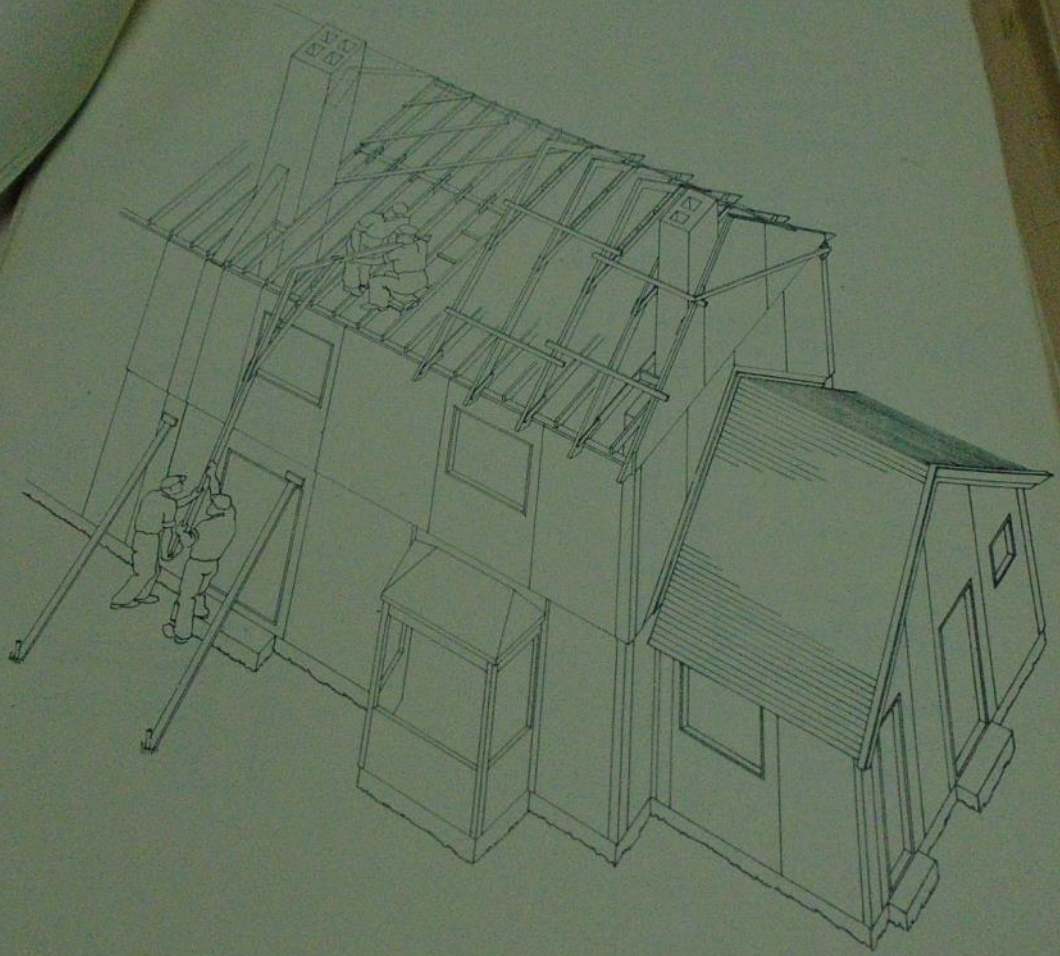
Ⓐ



1/099

DIAGRAM 5

(A)

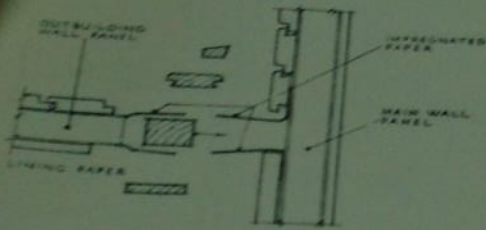


TH:100

DIAGRAM 6

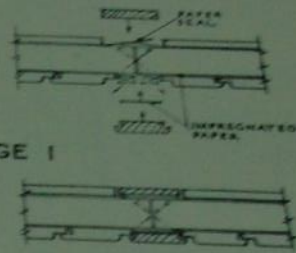
Ⓐ

JUNCTION OF WALL OF
OUTBUILDING WITH MAIN
GABLE WALL

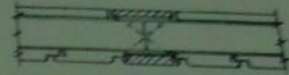


STAGE 1

JUNCTION OF MAIN
WALL PANELS

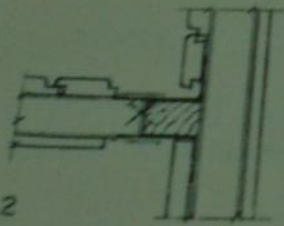


STAGE 1

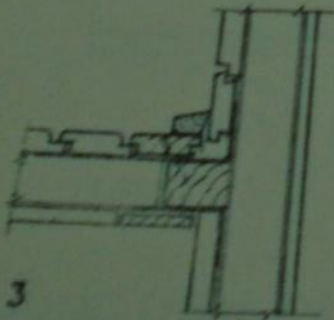


STAGE 2

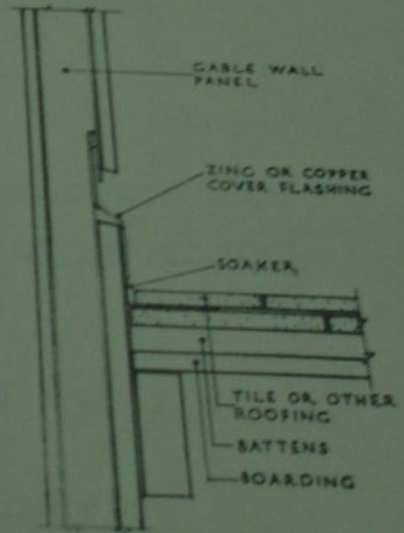
RAKING FLASHING AT JUNCTION
OF OUTBUILDING ROOF WITH
MAIN GABLE



STAGE 2



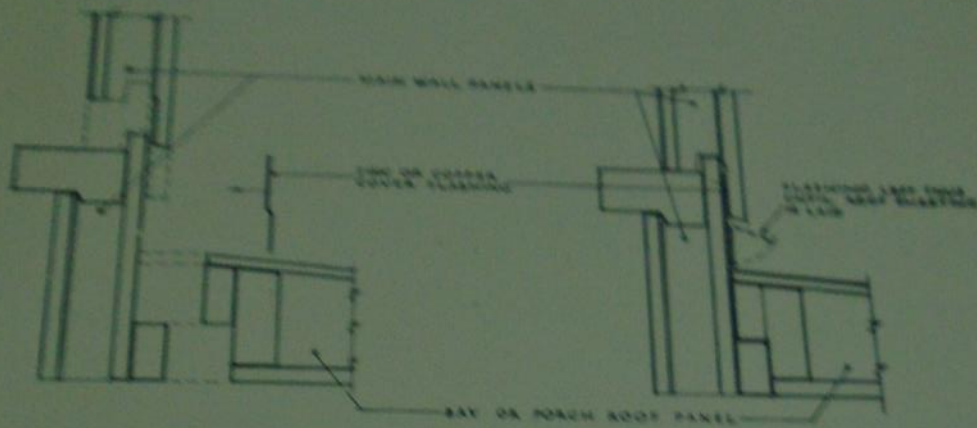
STAGE 3



DIAGRAM

7

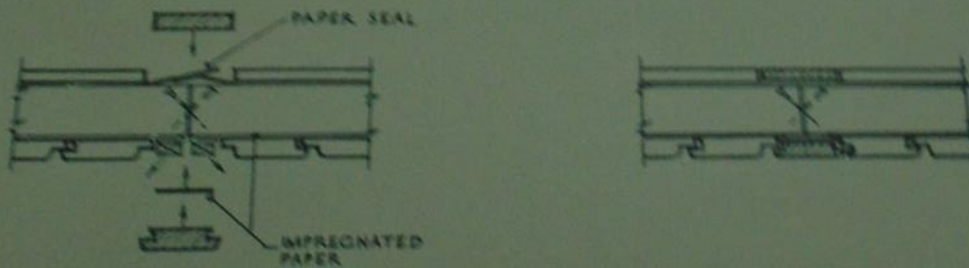
(A)



STAGE 1

STAGE 2

JUNCTION OF BAY OR PORCH ROOF WITH MAIN WALL



STAGE 1

STAGE 2

JUNCTION OF MAIN WALL PANELS

DIAGRAM 8

(A)