Condition 4 (Plant Room Door)

Additional Information required :- *To fully discharge the condition however, please can we get some information on the treatment to the original internal plant room door. The approved arrangement was for this door to be encapsulated. All we really need here is a section of the proposed arrangement as I assume there will be some need for the insertion of a plasterboard wall or something similar. The methodology should then just focus on how the door is to be protected during the works.*

Step-by-Step Construction of a Protective Wall Around an Existing Door

This method creates a **non-load-bearing stud wall** in front of an existing door so the door remains protected, hidden, and reusable later if needed.

Materials Needed

- Timber studs (typically 89mm × 38mm or 100mm × 50mm)
- Top and bottom plates
- Damp-proof membrane or foam strip
- Screws and wall plugs
- Plasterboard/drywall
- Insulation (optional)
- Vapour barrier (optional)
- Protective sheet material:
  - plywood
  - OSB board
  - foam insulation board
- Expanding foam or acoustic sealant
- Joint tape and filler
- Paint or finish

Tools

- Tape measure
- Spirit level
- Drill/driver
- Circular saw or handsaw
- Utility knife
- Stud finder
- PPE (gloves, eye protection, dust mask)

1. Inspect the Existing Door

Before covering it:

- Check the door and frame for damp or rot.
- Ensure the door opens/closes correctly.
- Remove handles or projections if desired.
- Clean the surrounding wall.

If the door may be reused later, avoid damaging the frame.

2. Protect the Door

Cover the entire door and frame with protective layers.

Recommended build-up:

1. Soft foam sheet or insulation board against the door
2. Plywood or OSB protective board screwed lightly into surrounding trim (not the door itself if possible)

This prevents:

- impact damage
- moisture issues
- accidental screw penetration

Leave a small air gap if possible.

3. Mark the New Wall Position

Decide how far in front of the door the new wall will sit.

Typical spacing:

- 25–100 mm away from the protected door surface

Use a level to mark:

- floor line
- ceiling line
- side wall lines

4. Install Bottom Plate

Cut timber for the floor plate.

Fix it to the floor using:

- masonry anchors for concrete

- screws into joists for timber floors

Add foam strip beneath for sound and moisture separation.

5. Install Top Plate

Transfer measurements to the ceiling.

Fix the top plate directly above the bottom plate.

Ensure it is perfectly aligned vertically.

6. Build the Stud Frame

Install vertical studs between top and bottom plates.

Typical spacing:

- 400 mm or 600 mm centres

Add:

- end studs fixed to adjacent walls
- horizontal noggins/blocking for rigidity

Important:
Do not fasten studs through the existing door frame.

7. Add Insulation (Optional)

For soundproofing or thermal performance:

Insert:

- mineral wool
- acoustic insulation
- rigid foam board

between studs.

8. Install Vapour Barrier (Optional)

If the wall is on an external wall or damp-prone area:

Staple vapour membrane over studs before boarding.

Seal overlaps with tape.

9. Fix Plasterboard/Drywall

Screw plasterboard onto the stud frame.

Stagger joints if using multiple boards.

Keep screw heads slightly recessed.

10. Tape and Finish Joints

Apply:

- joint tape
- filler/joint compound

Sand smooth after drying.

Repeat if necessary.

11. Seal Perimeter

Use acoustic sealant around:

- floor edge
- ceiling edge
- wall junctions

This improves:

- sound isolation
- air tightness
- finish quality

12. Prime and Paint

Apply:

1. primer
2. paint or wall finish

The old door is now fully encapsulated but protected behind the wall.

Important Protection Tips

- Never trap moisture behind the wall.

- Leave a documented record/photo showing the hidden door location.
- Avoid permanently bonding materials directly to the door.
- If future access may be needed, consider making the new wall removable.

Step By Step Sequence Diagram

