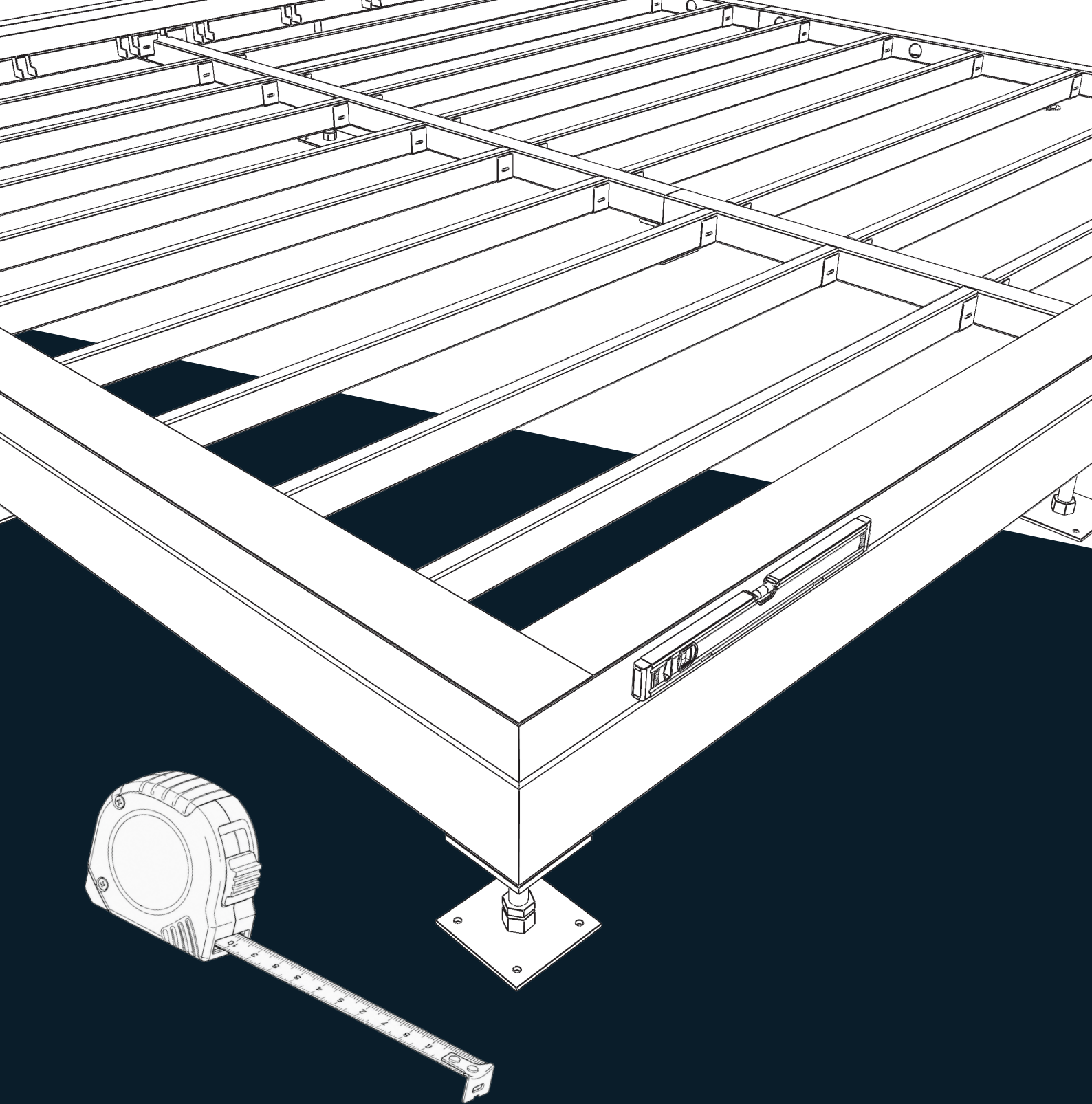




hup! Base

Survey & order guide

Version 1 | 07.26

hup! - A Building Revolution from Ultraframe

hup![®]

The better way to build

Survey and order guide

The purpose of this guide is to walk you through each stage of a hup! Base site survey, ensuring that all relevant and required information is collected and ready for the order to be completed and processed. It is designed to give you peace of mind that your order will be submitted successfully with all the necessary information included.

This guide consists of 9 simple site survey steps and 4 actions to finalise an order.

INITIAL SITE SURVEY

1. Identifying the location of the hup! Base.
2. Determining the screed level of an existing property.
3. Marking the new hup! Base DPC level on the property.
4. Marking the hup! Base back cill location on the property.
5. Measuring the hup! Base DPC to the existing garden ground level.
6. Identifying obstructions on the house wall.
7. Identifying obstructions related to drain runs.
8. Are bridging lintels required?
9. Photos from the site.

FINALISING THE ORDER

1. Walls and door openings.
2. Foundation type being used.
3. Wall and skirt finish.
4. Final details and considerations.

EQUIPMENT

To survey a hup! Base, you will need the following equipment:

- Spirit level - 1200mm (4ft) and 1800mm (6ft)
- Plumb bob and line set
- Tape measure
- Pencil and black marker pen
- Line marking spray paint (if suitable)
- Pack of glazing packers
- Line, stakes and line level - You can use a laser level and receiver set if you are familiar and confident; this can save time, but may not be suitable on all sites.

The site survey is to be undertaken by a competent person alongside the completion of the hup! Base quote or order form to ensure all relevant information is collected.

NOTE: Carefully filling out each section of the quote/order form helps avoid mistakes or assumptions.

Base datum

hup! Base with 100mm insulation - Building Regulation compliant for England and Wales.

hup! Base with 120mm insulation - Building Regulation compliant in Scotland.

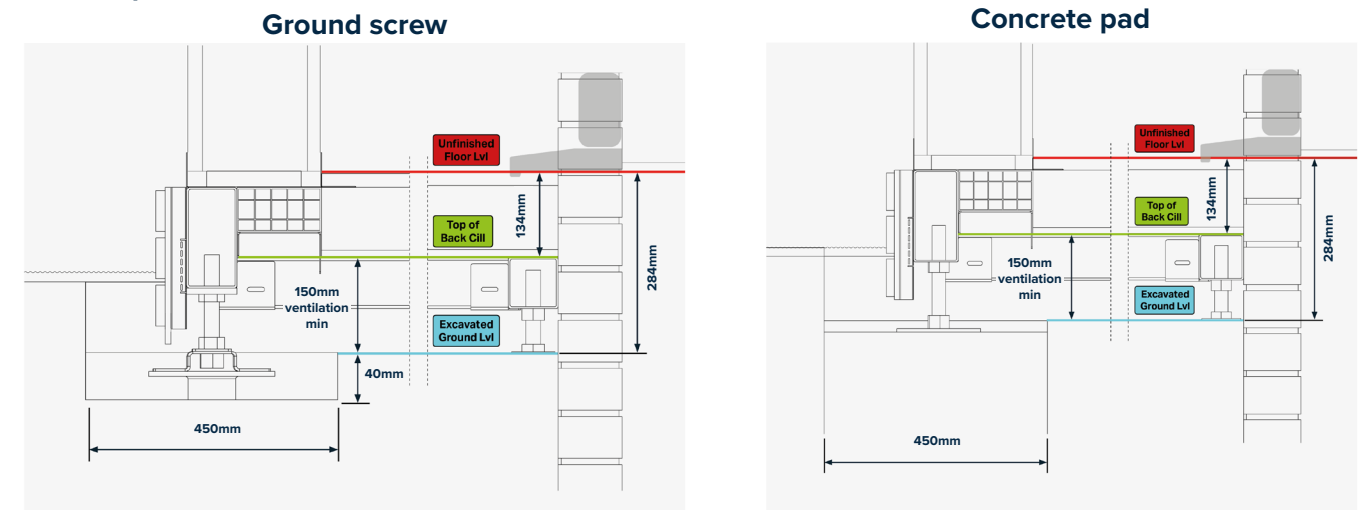
DATUMS EXPLAINED

The hup! Base has two main datum points that need to be transferred to the outside of the existing property to ensure the levels of the base are correct: **Base DPC** and **top of back cill**.

Base DPC (top of base steel)

This is the datum you measure from when you are working out the ground height around the base. Base DPC to ground is the critical datum required when submitting a hup! order.

This same datum is the reference point we refer to on a pad or screw plan for the measurement that screws or pads need to be from.



Top of back cill

The top of the back cill datum is the correct position to fit your back cill, and measuring down from this mark 150mm gives you the correct minimum air gap that is required under a base.

All hup! Bases require a minimum 150mm air gap from the top of the back cill to the ground dug out under; this air gap is essential for the entire area, not just the perimeter. A small amount of ground excavation may be required to get to these levels. This ensures there is adequate air flow under a base to pass Building Regulation requirements. Air flow under the base ensures moisture levels are regulated and no negative effects of moisture are caused.

Air bricks in base skirts are required to be placed at least **75mm to 150mm** above the finished external ground level. This height prevents surface rainwater from pooling into the vents, reduces splash-back from the ground, and ensures airflow is not obstructed by garden overgrowth, mulch, or gravel.

Base size

When providing the footprint of your building for hup! Base you can provide:

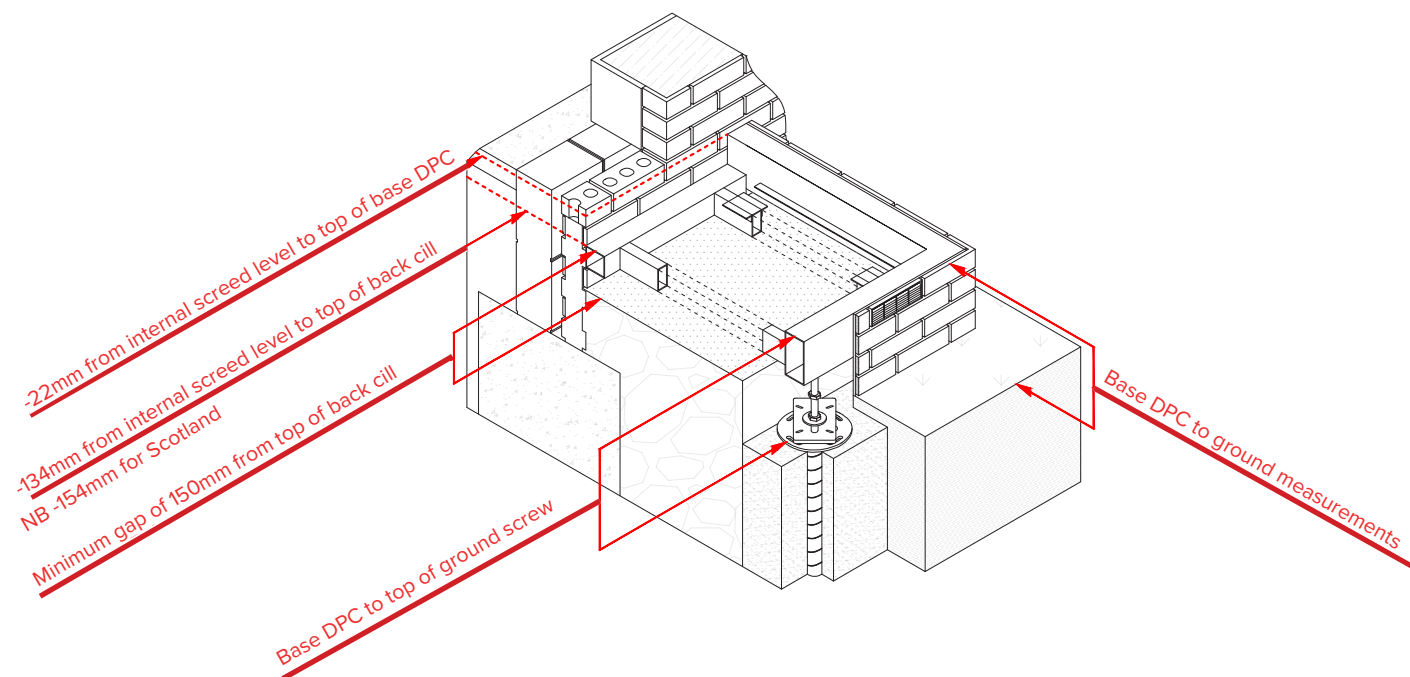
1. The sizes to external finish wall size (the edge of brick or render on the wall)
2. hup! Base size which is the edge of the steel frame and does not include the skirt.

Datum guide - pad and screw

The hup! base is compatible with concrete pads or ground screws. We need to know your foundation type at the point of order so we can provide the right connection details.

100mm of insulation is provided as standard to meet Building Regulations in England and Wales. 120mm insulation is provided to meet Scotland Building Regulations. Specify which base you require.

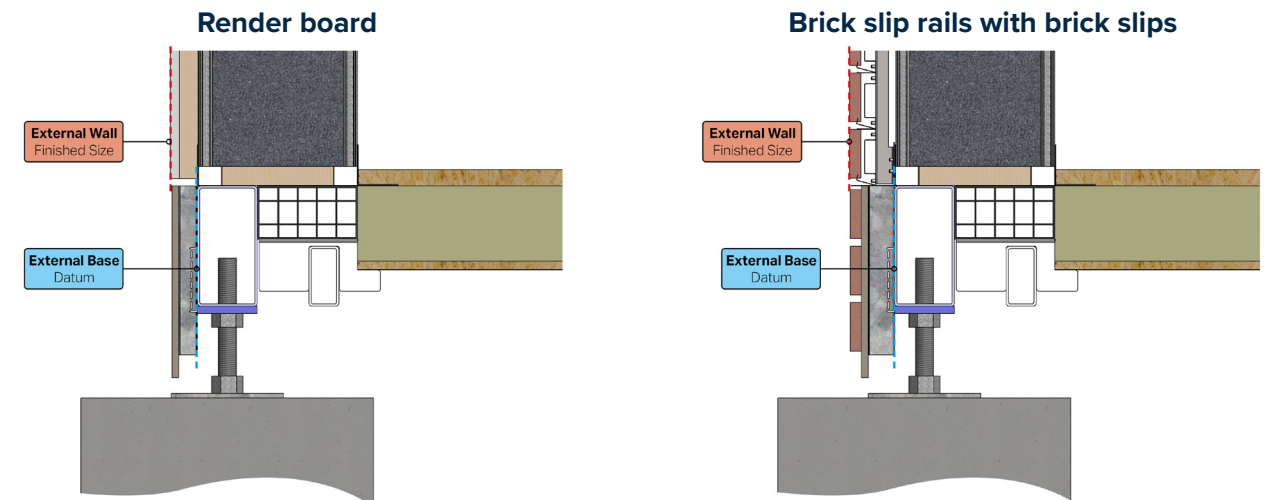
hup! Base



Site survey

1. Identify the location of the hup! Base

Measure the footprint of the extension accurately in relation to the location it will be fixed to the house (external finished wall size), using line marker paint, if appropriate, mark its position. Once this base location has been determined and marked, accurately fit the stakes around the perimeter. These will later be used for determining the base DPC to ground measurement.

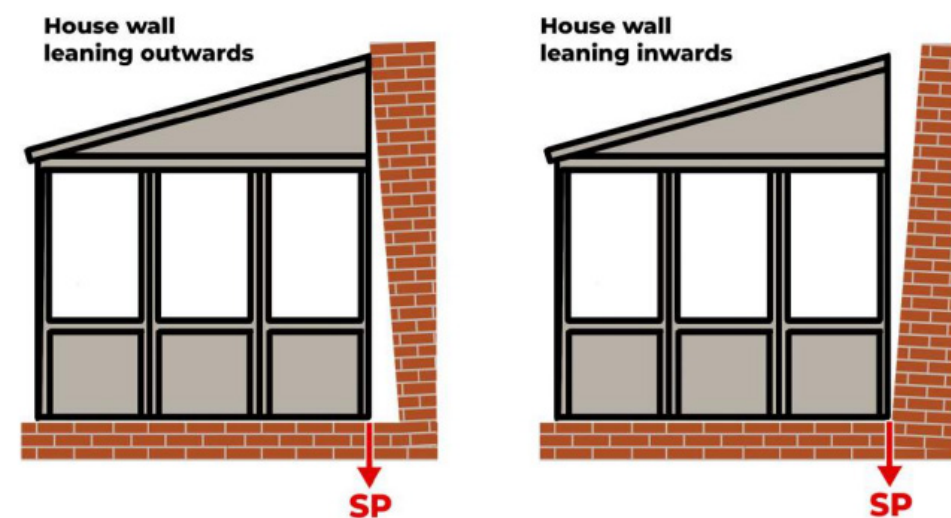


TIP: Measuring diagonally across the base footprint from corner stakes to the house wall where the extension is marked is vital to ensure the base has been marked out square.

Check the house wall the base will be fitted to for level. If the wall is angled in or out, this will affect the base position/size when the walls are fitted.

If the wall is leaning outwards, a plumb line should be fixed to the highest point where the roof will touch the wall. Where the plumb line meets the floor is where the base should be set out from (SP). The gap will need to be filled with packers (not supplied). The base and wall size will need to start from this point.

If the wall leans backwards, the base should be started against the wall (SP). The gap in this situation is at the top; therefore, packers (not supplied) will be needed to ensure the wall is fixed in the correct position and level.



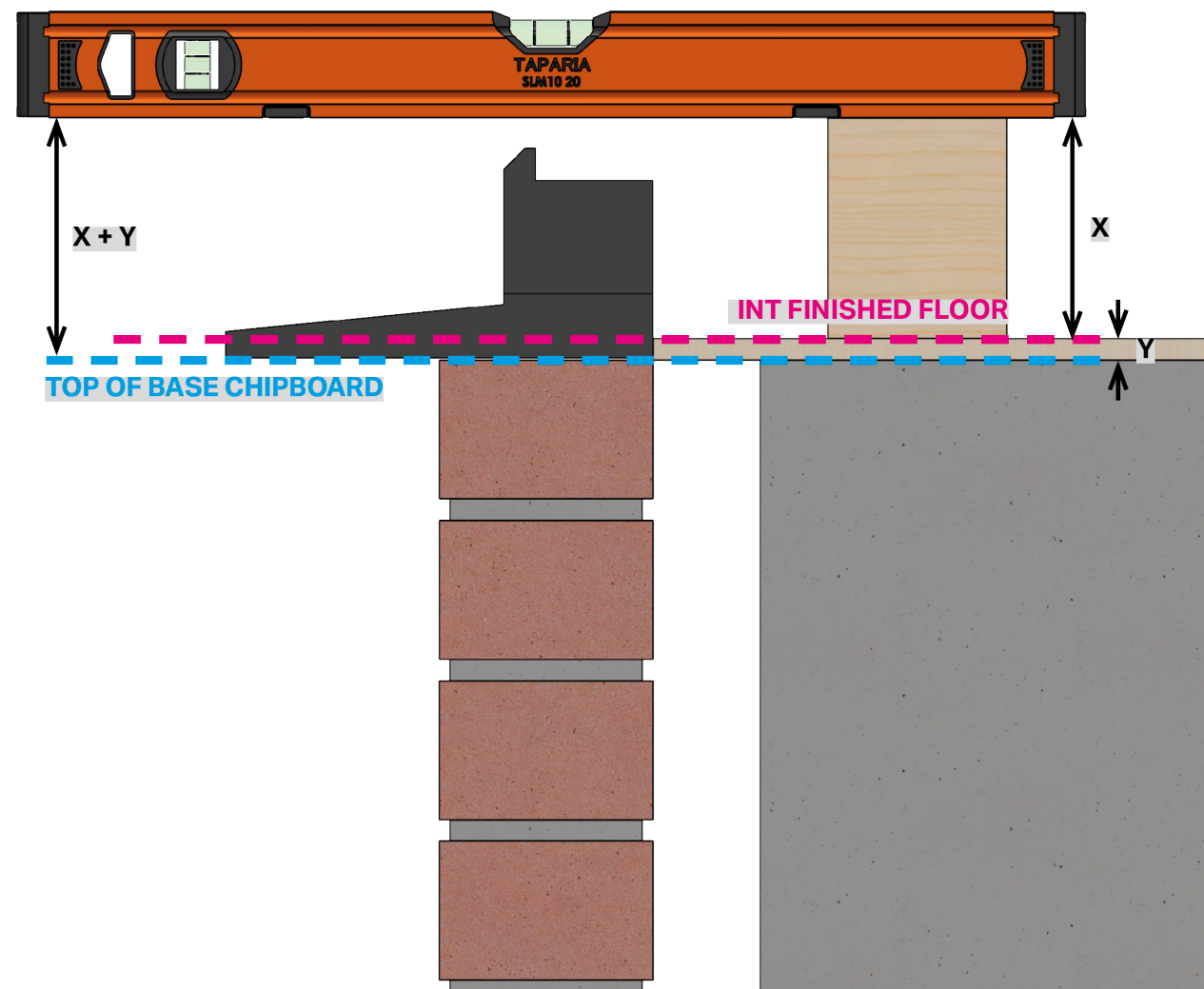
Site survey

2. Determine the screed level of the property

Using a door (preferred) or window opening, place a spirit level on top of the threshold spanning equally inside and outside of the opening, ensuring the level is plumb. Measure from the threshold (underside of the spirit level) to the floor screed using a tape measure.

If you can't measure to the screed level, measure to the finished floor and subtract its thickness to get the required measurement. This may need to be an assumption for the floor's thickness, but at this stage, a few millimetres either way will not be an issue.

NOTE: Often the house screed will be in line with the house DPC or tight to the underside of a door cill. This is an assumption and shouldn't be used as a certain datum. Following the process listed ensures the true screed level is found.

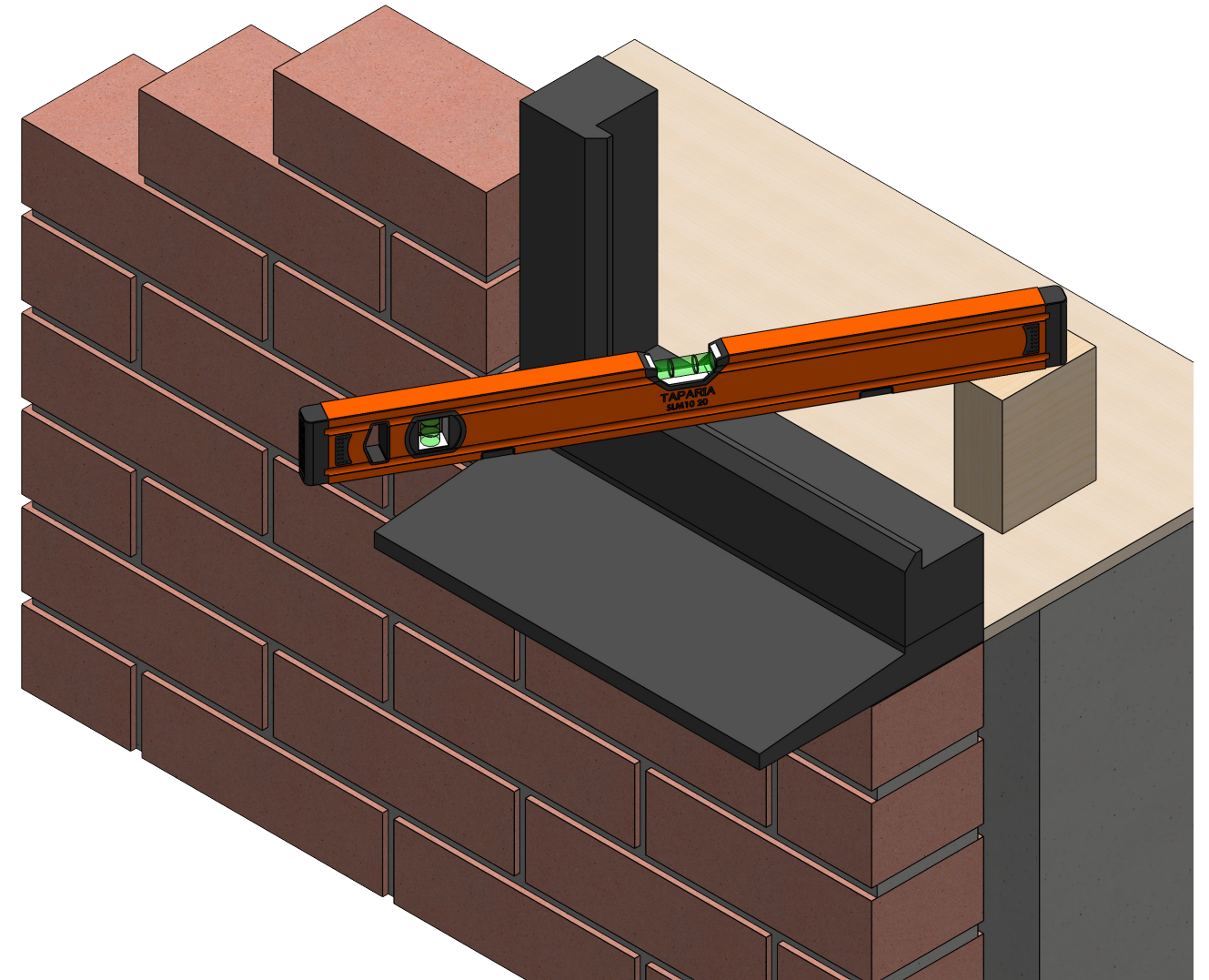


TIP: To secure the spirit level and free up your hands use the glazing packers on the inside of the property to hold it level.

Site survey

Now transfer the measurement from the underside of the spirit level to the outside of the property.

TIP: If the door cill or a step is obstructing the transfer of the measurement, place the level on a diagonal to the edge of the brick return. This will give you extra length past the cill to transfer the measurement.

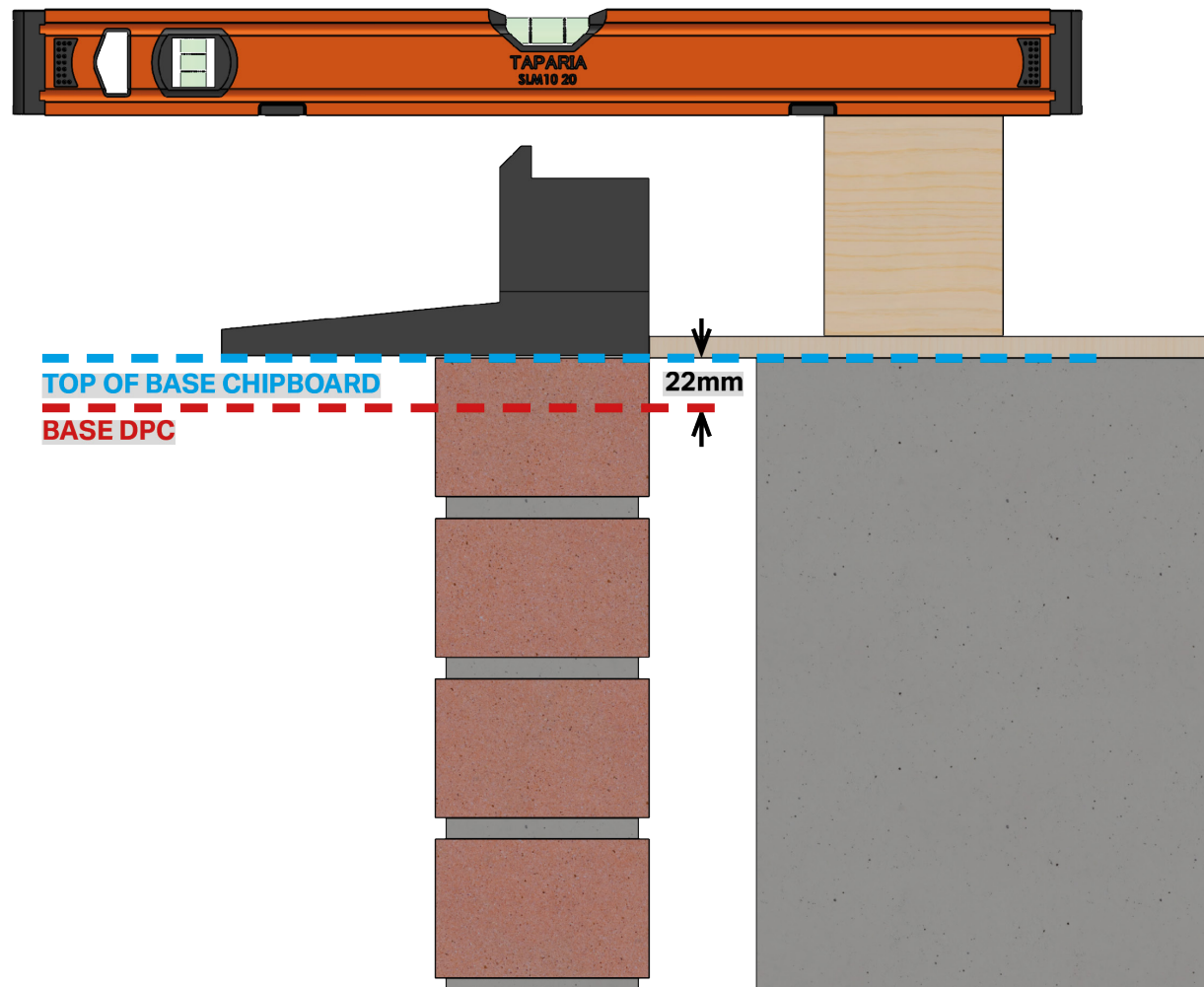


Site survey

3. Determine the hup! Base DPC height

If you are working to achieve a level transition from the new base to the existing property, the internal screed of the property corresponds with the top of the 22mm chipboard.

Now that the internal screed level has been determined and marked on the outside wall, **you need to then mark 22mm down from this point, which gives you the base DPC**. The house DPC has no impact on the hup! Base setting out position.



Site survey

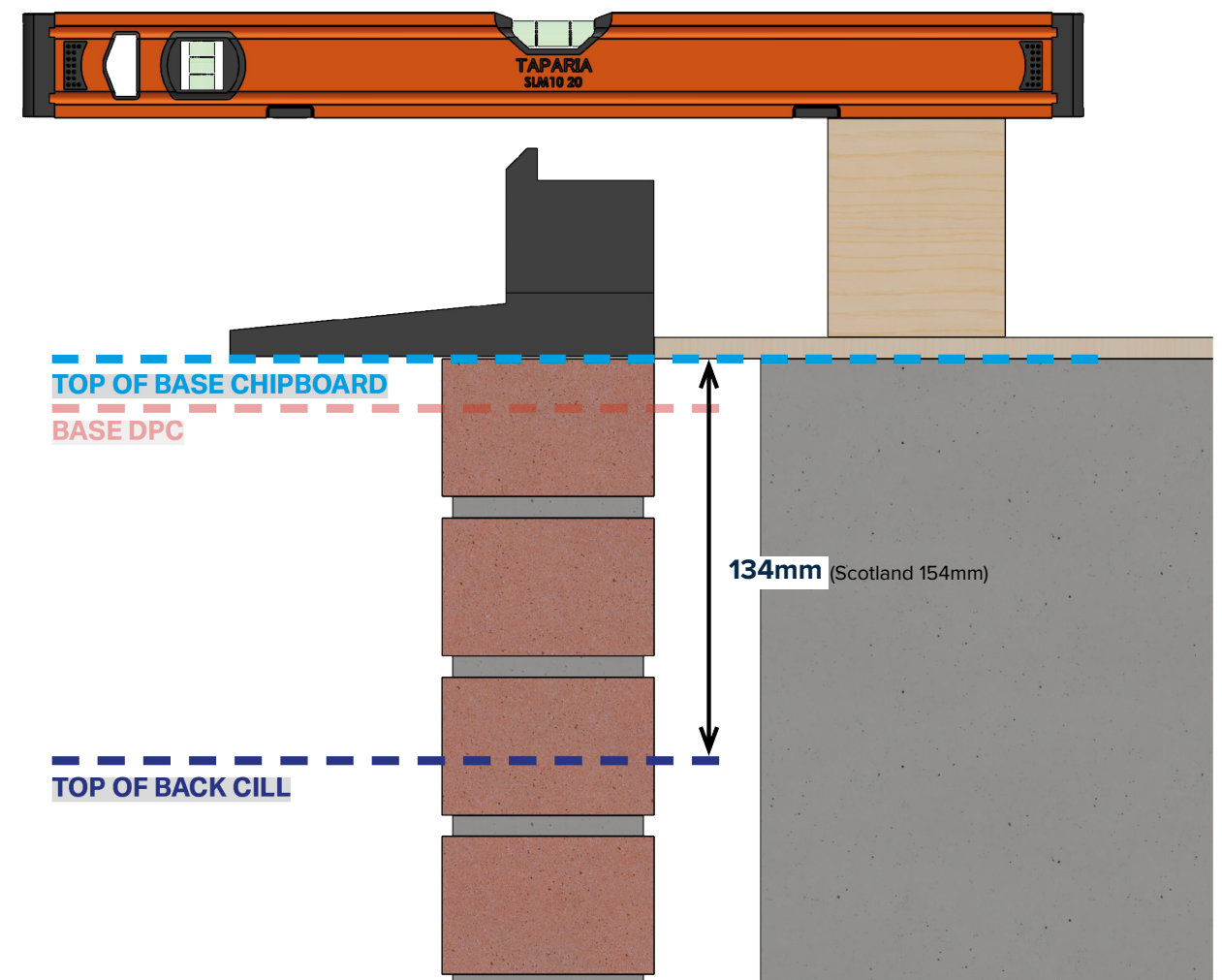
4. Determine top of back cill height

Marking the top of the back cill requires you to measure 134mm down from the internal screed mark on the outside of the property. This gives you the location you need to bolt on the back cill. Measuring 150mm down from the top of the back cill also gives you the required **air gap** that may need to be excavated.

NOTE: This gives you a clear idea of the amount of labour and waste disposal required to get an accurate price.

Ensuring these marks are clear on the external wall of the property will help avoid mistakes.

NOTE: On the Scottish Base (120mm insulation) you will need to measure down 154mm from the internal screed mark to allow for the thicker insulation required on Scottish bases.



Site survey

5. Measuring the hup! Base DPC to ground level

Before we measure the base DPC to ground measurement, which gives us the information we need to calculate the base skirts and ensure we manufacture the base suitably, we need to set up either our string line or laser.

NOTE: Bases over 225mm from base DPC to the ground require extra steel on the underside of the ring beam to ensure strength and skirt stability.

Using the stakes, set up a builder's line and line level around the perimeter of the proposed base area at the **base DPC level** marked on the house wall.

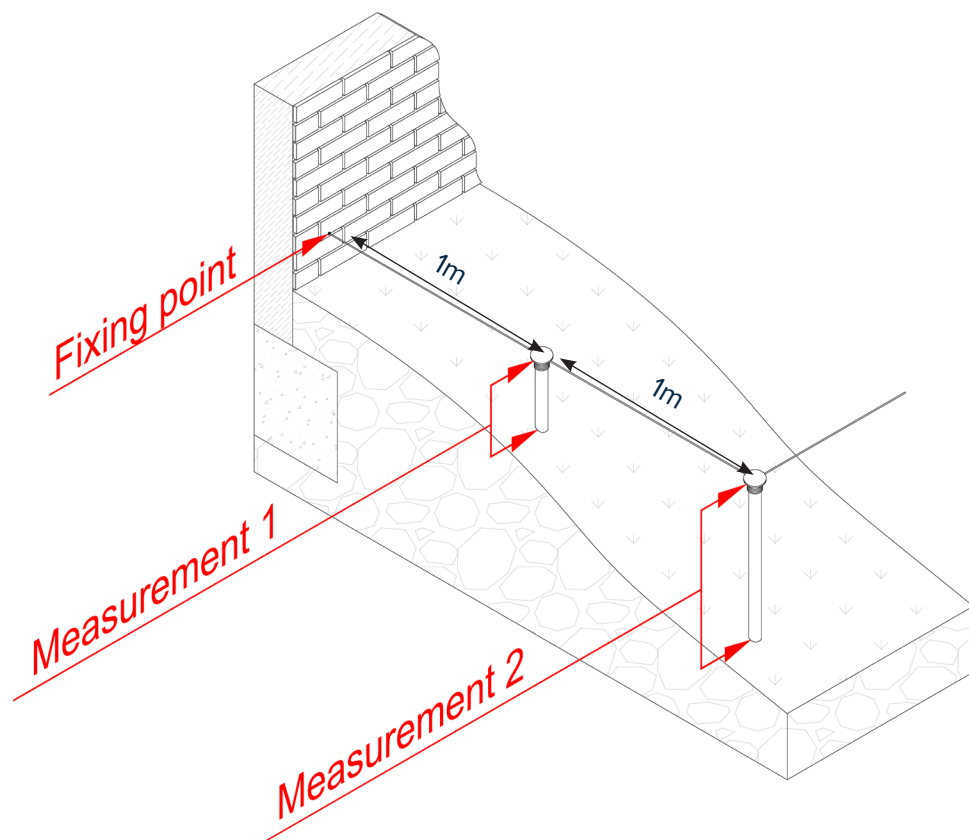
Going around the base footprint, identifying the lowest areas, measure down from the line with a tape measure to identify the base DPC to ground measurement. Be sure the line is tight and level at all times.

If you are using a laser, set up the laser and receiver to allow you to collect the DPC to ground measurement.

If you are working on a level site and the various DPC to ground measurements are within 20mm-30mm, specify the deepest measurement as the average.

Fill out the relevant section on the quote/order form or survey drawing.

IMPORTANT: If the ground level varies drastically (sloping ground), mark each base DPC to ground measurement on a base plan with the measurements roughly 1 metre apart.



Site survey

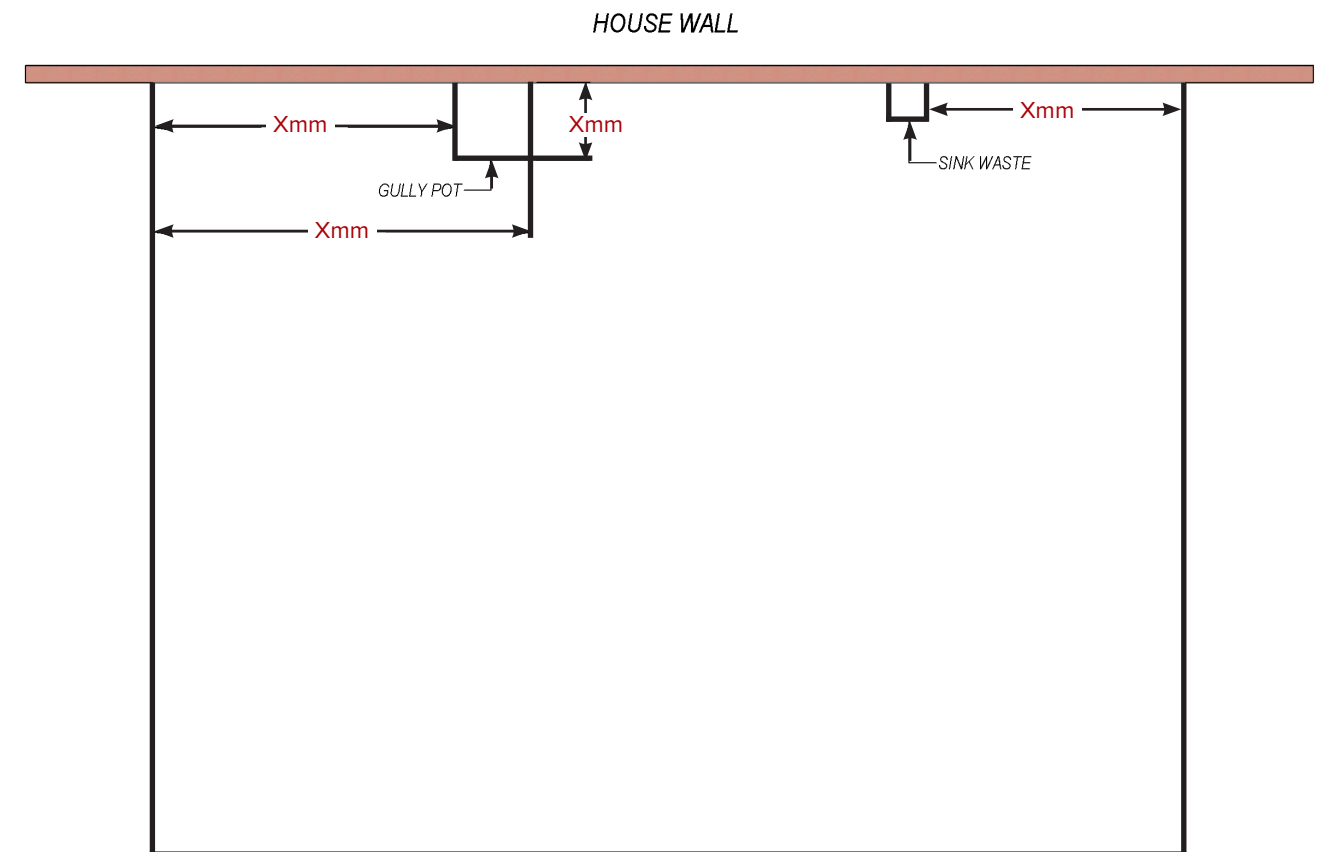
6. Obstructions on the house wall

hup! Base can be manufactured to avoid many obstructions you may come up against on a building site. These can include drains/sink waste, soil pipes, air bricks in existing houses, gas/electrical lines or vertical profiles e.g. chimney breasts or a bay window.

Drawing any obstructions on the base plan is vital for the team to be able to manufature a profile to avoid such obstructions. These measurements should be taken from the outside edge of your extension to the obstruction, allowing a good amount of tolerance, at least 25mm on either side of the obstruction.

We do not allow tolerance on any measurements given.

IMPORTANT: Always measure obstructions from the same point to avoid mistakes, for example, the left-hand edge of the planned extension or conservatory.



TIP: The more tolerance, the better, as profiles cannot be edited on-site.

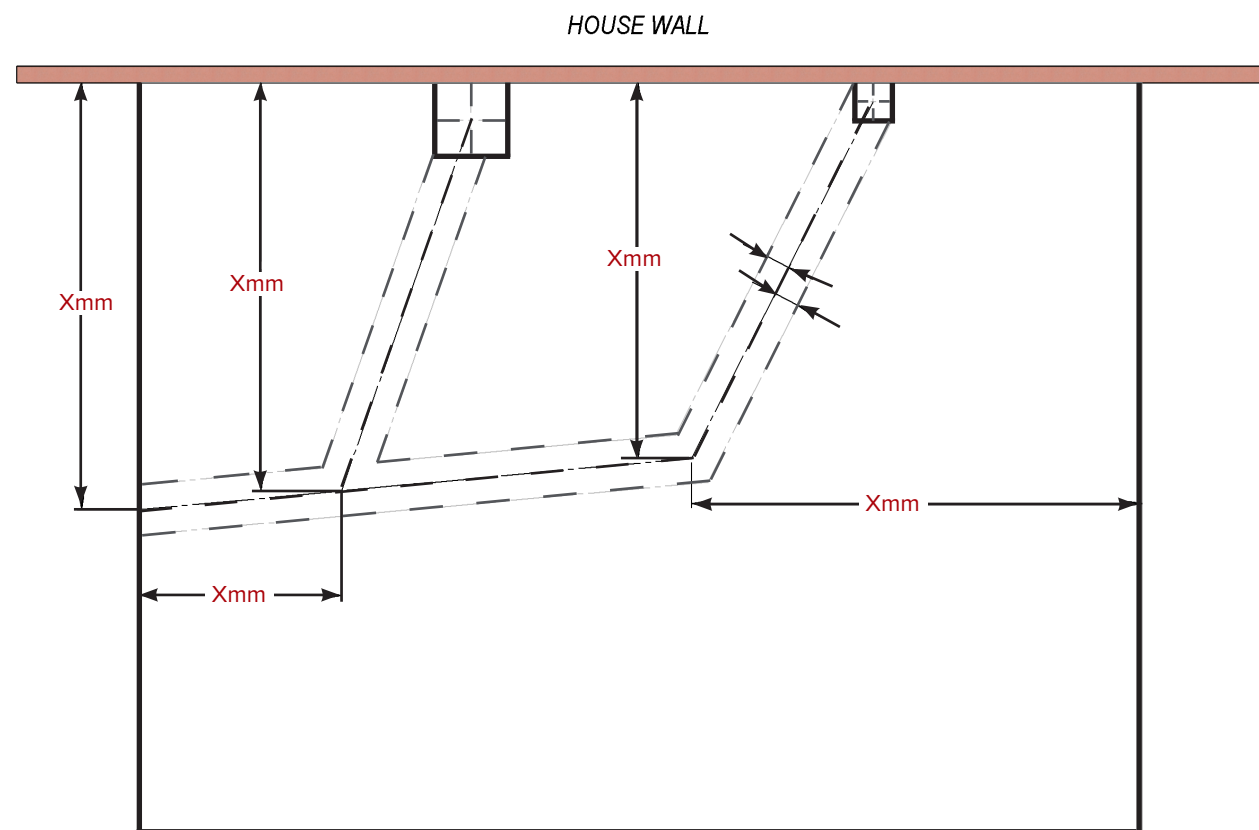
Site survey

7. Identifying obstructions related to drain runs

Inspecting the site for drainage runs is very important to avoid unexpected costs and delays at a later date. Checking along the house walls looking for waste pipes, gully pots and inspecting the entire site for manholes will help you identify drainage routes.

If you find drainage runs, they should then be drawn (with tolerance) on the base plan to inform us of their location and direction.

TIP: Lifting the manhole cover will assist in working out drainage run directions.



Pad or Screw plans will be drawn to suit drainage runs, but build over agreements are not the responsibility of hup!. A distance is often specified in a build over agreement that dictates how close we are able to put a footing to a pipe. All of these things need to be confirmed and specified before the order is placed. Any information that is not collected at this point will cause delays to the project as we wait.

Manhole inspection openings can be included in bases if required to assist with rodding or manhole maintenance at a future date. These are covered by the finished floor but are an option in an emergency. All drains that remain under the hup! Base should be double sealed, and rodding locations outside of the base's perimeter are strongly advised.

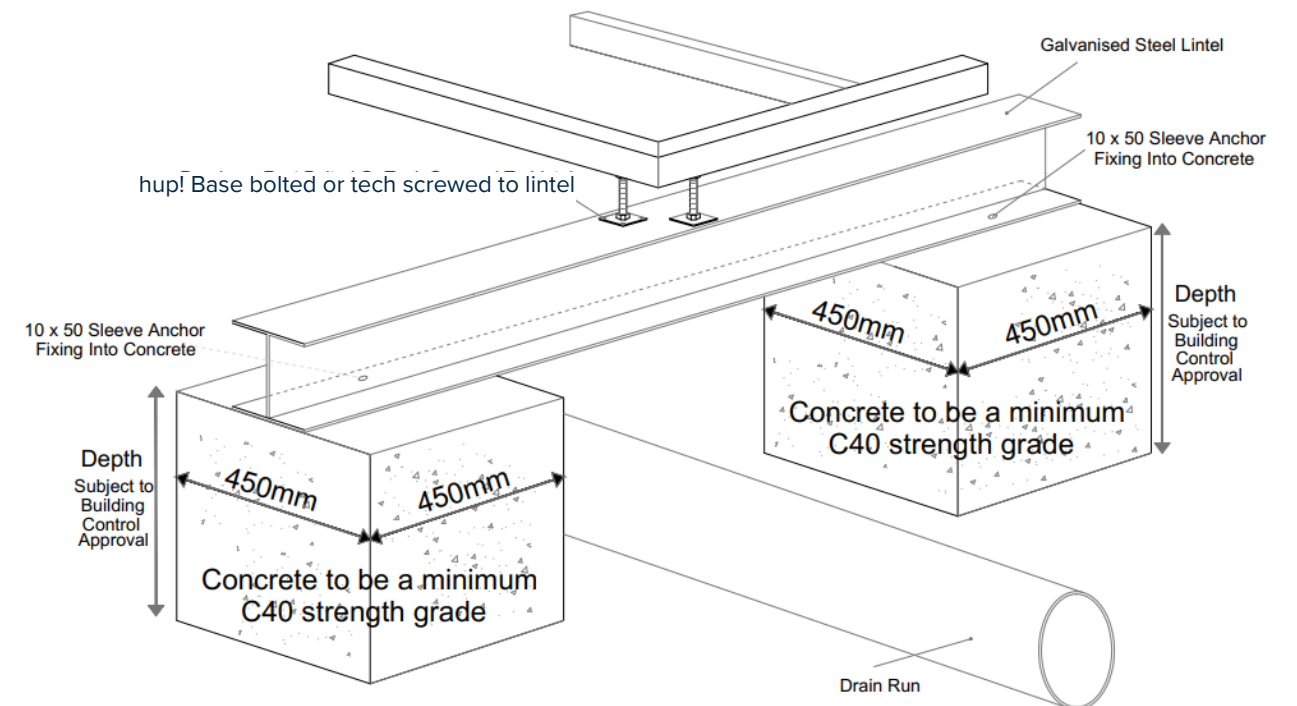
Site survey

8. Bridging lintels

If a drain run interferes with a leg position, a galvanised bridging lintel that spans the obstruction can be supplied by hup! Base at an extra cost. Legs are usually placed at the corner of each base, so if there are pipes or drain runs near the corner of the base, a bridging lintel will most likely be required.

The bridging lintel has a depth of 180mm and requires the pads or screws in that location to be set deeper. Legs are usually placed at the corner of each base, so if there are pipes or drain runs near the corner of the base, a bridging lintel will most likely be required.

It is recommended that any cutting and drilling of the lintel on site is treated to prevent rust



NOTE: The screws or pads that need to be set deeper will be specified on the screw or pad plan provided.

Should you require a bridging lintel, it is important to work out the depth of the pipe that is being bridged to ensure the bridging lintel can pass over the top of the obstruction without fouling it.

IMPORTANT: A base DPC to the top of the pipe measurement must be included on the survey.

At the survey stage, it is likely you will only be able to notify us of potential bridging lintels required on the corner of the base, as you can see from the base perimeter you have marked out, whether a pipe will run past it.

We may have to add extra bridging lintels on some jobs post survey if we discover they obstruct other leg positions. These will need to be charged at an extra cost.

Having an accurate drain run is extremely important for the design of the base and to ensure you have no unforeseen errors when fitting foundations.

Site survey

9. Photos from the site

Once the main survey has been completed, it is advised to take a few photos of the house wall that the hup! Base will be connecting to and the area where the base will be fitted.

This helps our teams understand a site's requirements, and also allows us to double-check a site to ensure nothing obvious has been missed.

These photos should then be sent along with the completed order.

Finalising an order

2. Foundation type

A hup! Base can be fitted on two main foundation types: concrete pads or ground screws.

Specifying the foundation type and ensuring this does not change ensures the base plans you receive after the order are correct.

Your base plan and the connectors supplied will vary according to the foundations, used. Please inform Ultraframe if you change the foundation.

NOTE: Ground screws are not supplied and will need to be installed by a separate ground screw company. Orders must be submitted with all the required information before pad or screw plans can be issued. Allow a minimum of 5 working days after the order to book a ground screw company to come and fit screws.

3. WALL AND SKIRT FINISH

Deciding the wall and skirt finish needs to be completed before processing the order. You can choose from the following shades of bricks and mortar or choose a plain skirt.

If using hup! brick slip rails, it is possible for the rails to be supplied down the the ground eliminating the need for a skirt. Please specify this option when ordering.

NOTE: A plain wall or skirt is for cladding or painting and is not to be rendered. Render should not be applied below the base DPC (skirt level), and a brick skirt is advised. These four brick slip options are for the skirt only.



335 Red Multi



400 Smooth Red



688 Rustic Buff Multi



700 Smooth Anthracite

4. FINAL DETAILS AND CONSIDERATIONS

At this stage, the main elements of the site survey have been completed and should have been filled out on the order or survey form.

Some final selections that may apply to you.

Freestanding? Is the base you are using a freestanding base that has no host wall? If so, please select the freestanding option.

Build over agreements are likely needed to be agreed with local water authorities, so check the type of pipe and whether it is private or not.

Finalising an order

Site storage - When the hup! Base is delivered, it can take up a lot of space, so having a plan on where you store the materials can help to avoid the product getting damaged by the weather or being stacked incorrectly on the day of delivery.

Radon - hup! Base does not supply, install, or accept responsibility for the radon barrier system. Responsibility for its specification, detailing, installation, and performance rests solely with the appointed designer and installer.

Where radon protection is required, the hup! Base system may be used in conjunction with a suitable radon barrier, which must be installed fully in accordance with the membrane manufacturer’s instructions and applicable building regulations.

Potential delivery delays - If survey details are missing or not submitted at the time of order, delivery dates can be pushed back while we wait for details. To avoid this, ensure the survey has been thoroughly completed and processed.

Ground screw or pad plans - Plans are issued at the first opportunity post the confirmed order being placed. This usually takes a minimum of 5 working days.

Screw and pad packs include detailed foundation position plans, including a cross-section showing the height required from the top of the screw or pad to the base DPC (top of steel). Screw or pad packs also include a datum guide and a base labelling map that corresponds to identification numbers welded to each member of the base, assisting in setting out before fitting.

The depth of pads or screws is to be determined by either the screw company, undertaking the work or, in the case of pads, by a structural engineer who is considering all loading and site details.

It is the responsibility of the ground screw supplier to demonstrate that the applied vertical and horizontal forces can be resisted by the installed ground screws. A test certificate that states the passing of the required standard for building control must be supplied to customers once the job is complete.

Order form

Site postcode must be supplied

1. Base

Are you using the hup! Base? ☐ Yes (please supply site photos) ☐ No

If yes, please answer the questions below:

Is there a screed? ☐ Yes ☐ No (min 75mm screed)

What height is the base DPC to ground?

If you have a sloping skirt, please draw it on the diagram, giving a measurement every metre.

Base Insulation type: ☐ 100mm insulation (England/Wales) ☐ 120mm insulation (Scotland)

Which foundations will you be using? ☐ Concrete pads ☐ Ground screws pile ☐ Supplier

If using ground screws pile, have you completed your ground test before ordering. ☐ Yes ☐ No

Are there any drain runs within the foot print of the new base?

Which skirt finish do you require? ☐ Plain ☐ Brick slips (brick type) ☐ Brick slips with rails to ground

If you would like brick slips, please let us know the brick type and mortar colour.

Brick type ☐ Red Multi ☐ Smooth Anthracite ☐ Smooth Red ☐ Rustic Buff Multi

Mortar colour ☐ Grey ☐ Sand ☐ Red

Are there any drain runs within the foot print of the new base? ☐ Yes ☐ No Please supply details of their position on your plans

2. Datum / plan size

Please draw the footprint of your building marking each elevation A, B, C, D etc. Tick the box to indicate which dimension you are using, indicate a set out point of your plan.

☐ Existing / Traditional base size ☐ Finished wall size ☐ hup! base size (to edge of hup! clips)

Mark intrusions details: drains, pipes and intrusions.

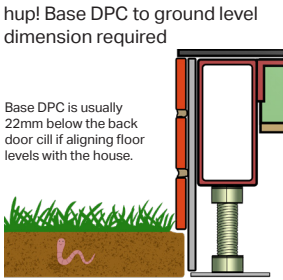
If you are within 500mm on a boundary line you may need to use our wall hinge system ☐ Yes ☐ No - see page 12 of the install guide

Please indicate how far the boundary line is from the new extension.

Extended Base Tray required? ☐

Width of Cavity wall 300mm. See hup! Specification Guide for more details.

Please note hup! walls will protrude at least 45mm (25mm for battens, plus c15mm depending on claddings) outside of your base so that the wall finishes (claddings) will be ventilated. All critical dimensions will be confirmed (before order stage on order confirmation).





Order form

2. Elevations

Please draw each elevation of your hup! walls marking the elevations clearly with A, B, C, D etc. Include window and doors sizes and distance from the eaves as well as the floor clearly.

Tick this box if you require the cable management panel which is supplied on all panels above 560mm. ☐

hup! on existing wall

Is hup! going on a existing wall? ☐ Yes ☐ No If yes, ensure you draw on existing walls, position and height

What is the overall thickness of existing cavity wall?.....mm (internal to external)

Do you want it on cill or full clad? ☐ Cill (use internal frame dimension) ☐ Full Clad (use external base dimension)

If on cill, please send over ONLY the internal frame dimension. If using full clad, please send over ONLY the external base dimensions, pages 34-36. .

Ensure you draw the full elevation including existing walls.



Order form

3. Wall Finishes

The type of wall finish can change the sequence of the battens and calcium silicate board, please tick the wall finish for this project?

☐ Brick Slips ☐ Steel façade (Boundary only) ☐ Render ☐ External Cladding - Type & Thickness

Brick Slips :

Ultraframe to supply: ☐ Yes Brick thickness..... Brick Shade: (See hupbrickslips.co.uk for details and prices).....

Mortar Colour: ☐ White ☐ Neutral Grey ☐ None Please note if supplying your own brick slips a lime based mortar must be used.

Window reveal detail : ☐ Aperture trim ☐ Reveal brick slips ☐ Reveal bricks and soldier course

4. Walling kit

Please tick the box to confirm which elements of the walling kit you will require to be supplied by Ultraframe.

- ☐ None - I am supplying my own
- ☐ Ventilation trim only
- ☐ Aperture trim only
- ☐ Batten kit (includes battens and fixings)
- ☐ Render Board kit (includes ventilation trim, aperture trims and battens)
- ☐ Aperture
- ☐ Reveal
- ☐ Solider
- ☐ Brick Slip Rails (includes trims. Brick slips not supplied)

5. Aperture Trim Colour

☐ White ☐ Smooth Grey ☐ Light Oak ☐ Rosewood

Surveyor's Details

If you would like us to liaise with your surveyor on this hup! order, please put contact details below.

NAME:

CONTACT NO:

EMAIL ADDRESS:

Help us to help you



Notes

Please review the details below and look to answer as much as possible within this document.

- hup! Base section**
- ☐ Datums - Existing base size or external wall finish
 - ☐ Indication of a set out point on the host wall
 - ☐ Indicate the measurement to the boundary line
 - ☐ Has the ground screw test been completed before ordering
 - ☐ Have you obtained build over agreement if applicable before ordering?
 - ☐ If a build over agreement is required please supply water board parameters from the pipe
 - ☐ Confirm location of drains/manhole or that there are none underneath the hup! footprint
 - ☐ Confirm locations of any rear wall obstructions i.e. SVP or gullies
 - ☐ DPC to Ground Measurement
 - ☐ Confirm whether there is sloping ground - See specification for survey details required
 - ☐ Base skirting, brick type, mortar colour
 - ☐ Is there a screed? Min 75mm please state yes or no or tick the box on page 1
 - ☐ If placing hup! on an existing base - have you reviewed the different offsets

- hup! Wall section**
- ☐ Boundary wall solution - if you are closer than 500mm please contact Ultraframe for further info
 - ☐ Please consider eaves heights, window and door sizes any obstructions indicated
 - ☐ Wall finish and colour
 - ☐ Brick slip finish - who is supplying?
 - ☐ Brick slip thickness, 14mm, 15mm or 20mm?
 - ☐ Aperture trims or brick reveals
 - ☐ If you are using cladding near a boundary - does it meet fire regulations?
 - ☐ If any walls are less than 800mm high - any opening window may need permanently restriction?
 - ☐ If building hup! on a dwarf wall - state what size the overall cavity wall thickness is
 - ☐ Refer to table in the specification guide for extra insulation requirements
 - ☐ If cladding ask about our steel facade on boundary lines

- Roof section**
- ☐ State type of roof
 - ☐ Pitch of roof (note: Flat roof is at 1 degree)
 - ☐ Check the gutter is in not overhanging the neighbour's boundary line
 - ☐ Glass type and colour or unglazed
 - ☐ Does the glass need a muntin bar or oversized glass
 - ☐ Any spans over 4000mm on Ultrarroof
 - ☐ Any spans over 5600mm on Flat Roof
 - ☐ Any elevation over 5800mm check the beam split is supported by a wall / post
 - ☐ Are gallows brackets required - do they need ordering
 - ☐ Hip/Ridge choice (metrotile only)
 - ☐ Fascia and gutter colour
 - ☐ Outlet / downpipe position

- Other information to assist us in your order**
- ☐ Site pictures
 - ☐ Building Control - who are you using
 - ☐ Ground screw pile company - who are you using
 - ☐ Do you have enough room for storage on site or is this split delivery - please discuss with Ultraframe
 - ☐ Advise Ultraframe on the room use i.e. gym or hot tub for the correct screw or pad count for a loading report



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JN: 9437

hup! - A Building Revolution from Ultraframe

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The better way to build