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Version : 26 October 2018

ELITE*eco*

ELITE*pro*

ELITE*pro* STONE

Installation Guide

Registered in England N°. 4323895

Version : 26 October 2018

Introduction

The 3x ranges of 'ELITE' linear drains are designed, manufactured & assembled by Bathroom Engineering, for use in the construction of bespoke level entry or wet room type shower areas.

Made from the highest quality components, from market leading factories, these ranges are designed specifically to deal with the unique construction methods required to build floor drains into 'traditional' timber floor structures commonly found in the U.K. & other countries.

Made using premium 1.5^m/_m 304 grade stainless steel, the ELITE ranges include some essential premium features not commonly found in 'european / concrete' style drains including :

Standard Features

- Minimal visual impact, with super slim chassis (82mm wide), with tile insert cover grate
- Offset flanges support the drain within timber floors & suit different thickness of wall coverings
- Offset high capacity trap, that rotates, to overcome awkward joist directions and positions
- Height adjustable grate support frame, suits different floor finish thicknesses, & offers factory finished edge to drain / tile junction
- Reversible tile insert grate to offer 2x different drain cover styles
- Low profile chassis channel to reduce install preparation to the minimum
- Polished chassis channel with 'V' profile, to aid drainage, & reduce cleaning
- Removable hair guard to aid regular cleaning, and stop downstream blockages
- Trap securing block ("Noggin Block"), fixes to noggins, to aid stability during build up
- To ensure no leaks, all ELITE drain chassis are pressure tested at the factory.
- Factory tested, & 'security sealed' packaging, to ensure no missing parts

Premium Features (ELITE_{pro} & ELITE_{pro} Stone)

- During the final U.K. assembly & packing of the premium ELITE_{pro} ranges, a leak-proof waterproof tanking membrane is factory fitted, that is part of the matching AquaeGUARD range of wet-room sealing products

Product Identification

- ELITE_{eco} 12-22 ^m/_m Height Adjustable Frame for Tile Insert Grate
 - ELITE_{pro} 12-22 ^m/_m Height Adjustable Frame for Tile Insert Grate, PLUS factory fitted AquaeGUARD Membrane
 - ELITE_{pro} STONE 22-32 ^m/_m Height Adjustable Frame for Natural Stone Insert Grate, PLUS factory fitted AquaeGUARD Membrane
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- ELITE_{eco} is a timber floor drain, with height adjustable frame & grate, for floors upto 22 ^m/_m thick
 - ELITE_{pro} is as above, with added waterproof membrane, to suit floor tiles up to 22 ^m/_m thick.
 - ELITE_{pro} Stone is as above, for deeper 'Natural Stone' floor sections, from 22-32 ^m/_m thick

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Size*	ELITE _{eco}	ELITE _{pro}	ELITE _{pro} Stone
500*	WD 00800620	WD 00800280	WD 00800300
600*	WD 00800621	WD 00800281	WD 00800301
700*	WD 00800622	WD 00800282	WD 00800302
800*	WD 00800623	WD 00800283	WD 00800303
900*	WD 00800624	WD 00800284	WD 00800304
1000*	WD 00800625	WD 00800285	WD 00800305
1100*	WD 00800626	WD 00800286	WD 00800306
1200*	WD 00800627	WD 00800287	WD 00800307
1300*	WD 00800628	WD 00800288	WD 00800308
1400*	WD 00800629	WD 00800289	WD 00800309
1500*	WD 00800630	WD 00800290	WD 00800310
1600*	WD 00800631	WD 00800291	WD 00800311
1700*	WD 00800632	WD 00800292	WD 00800312
1800*	WD 00800633	WD 00800293	WD 00800313
1900*	WD 00800634	WD 00800294	WD 00800314
2000*	WD 00800635	WD 00800295	WD 00800315

* nominal size

List of Components

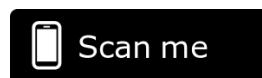
Remove all components from packaging, & lay out on underside of cardboard sleeve

1. Chassis (All models of ELITE)
2. Chassis with Factory Fit Membrane (ELITE_{pro} & ELITE_{pro} Stone only)
3. Height Adjustable Support Frame, with 2x sets of clip-on adjustment feet
4. Tile / Stone Insert Grate matched to Support Frame
5. High Flow rotating trap, with 50mm water-seal
6. DN50 PP to 2" ABS Adaptor (to fit Euro Style PP trap to UK ABS waste pipe)
7. "Dual Action" Trap Siphon Tube ^{c/w} Membrane
8. Trap Noggin Block (to stabilise trap when attached to Chassis)
9. Hair Guard (filters longer hair, & reduces downstream blockages).
10. Support Brackets ^{c/w} Height Adjustable Levelling Legs**

** Optional Extra

Technical Support

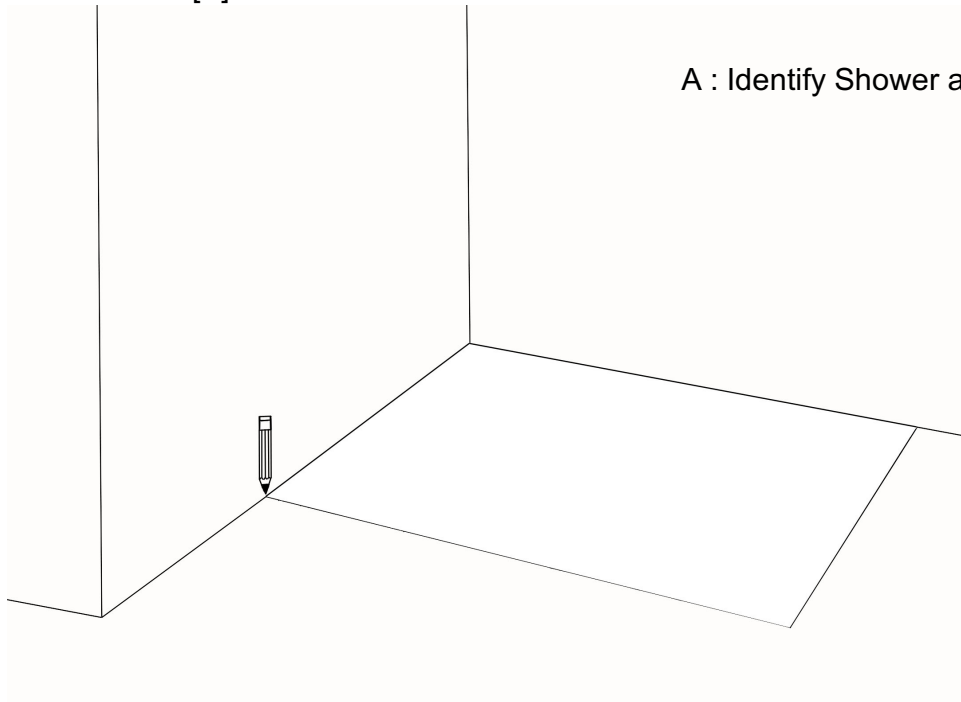
For Technical Support, please visit www.bathroom-engineering.co.uk and click on the support tab at the top of the page. Alternatively, use this QR code.



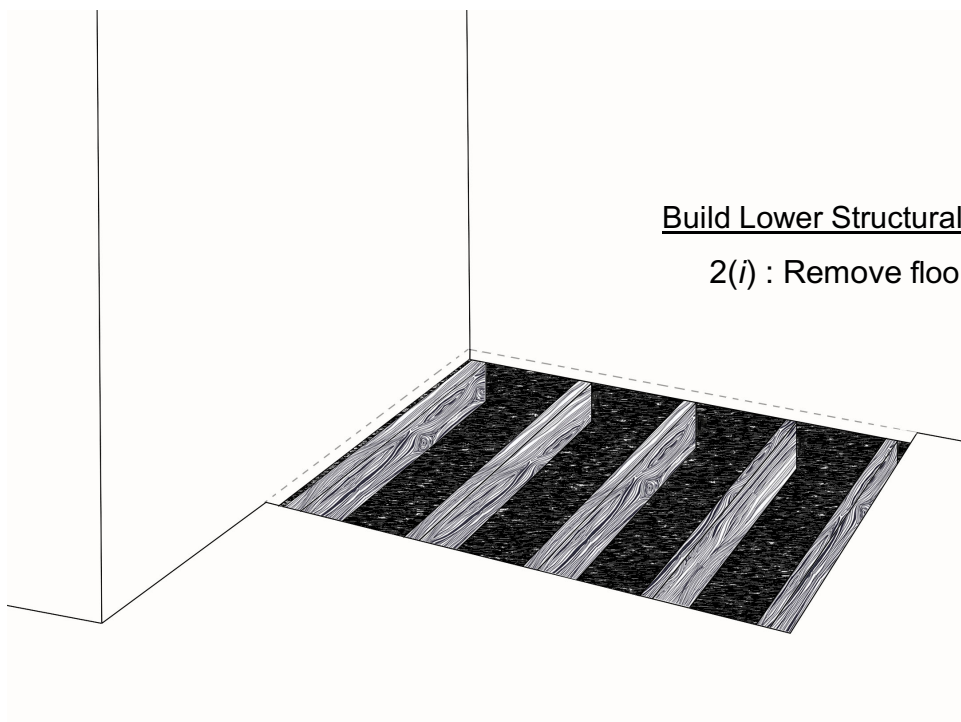
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Installation (Timber Floors – Existing or New)

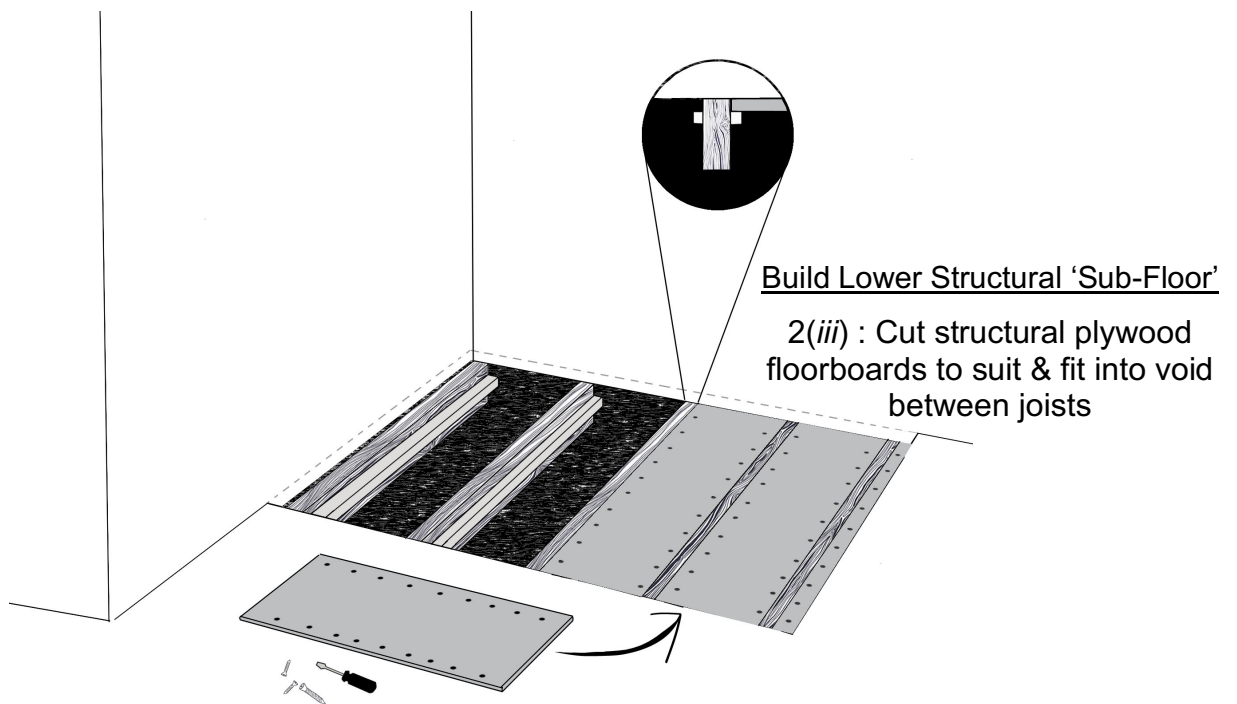
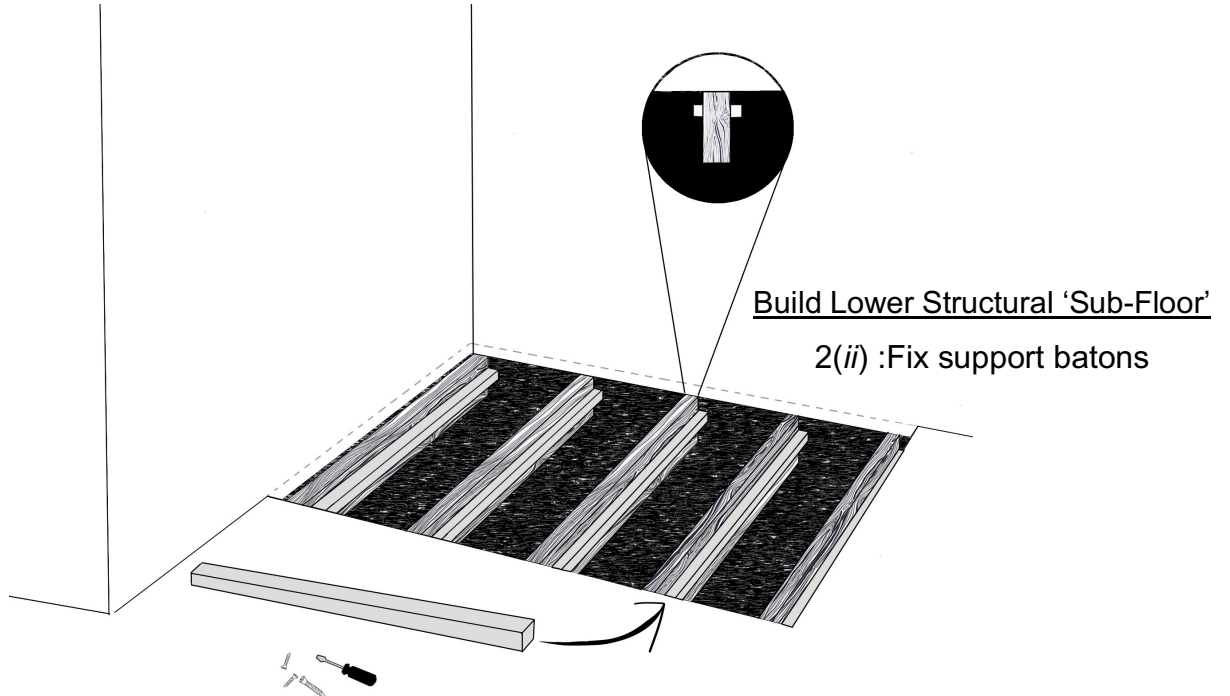
1. Identify Shower area. [A]



2. Create new lower structural 'sub-floor', by remove floor boards(i), fix support batons (ii), cut structural plywood floorboards to suit & fit into void between joists (iii).

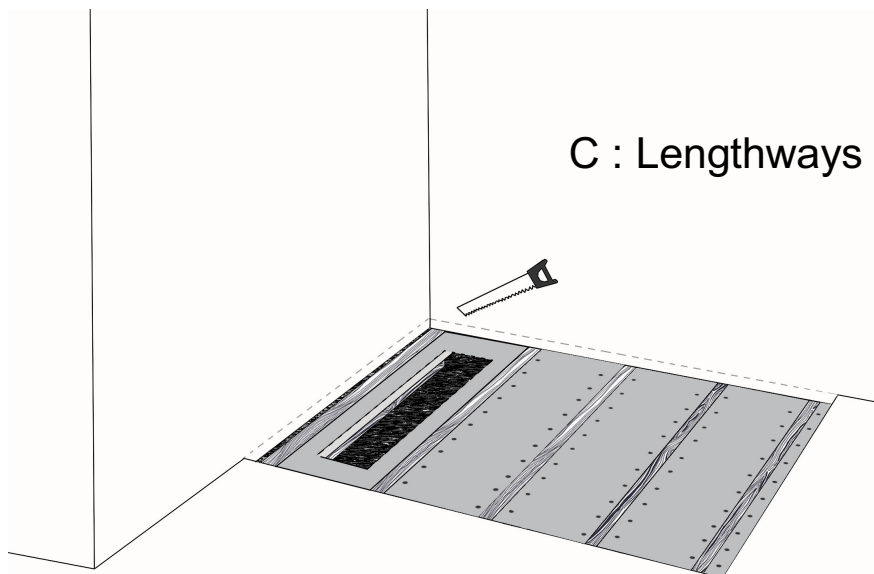
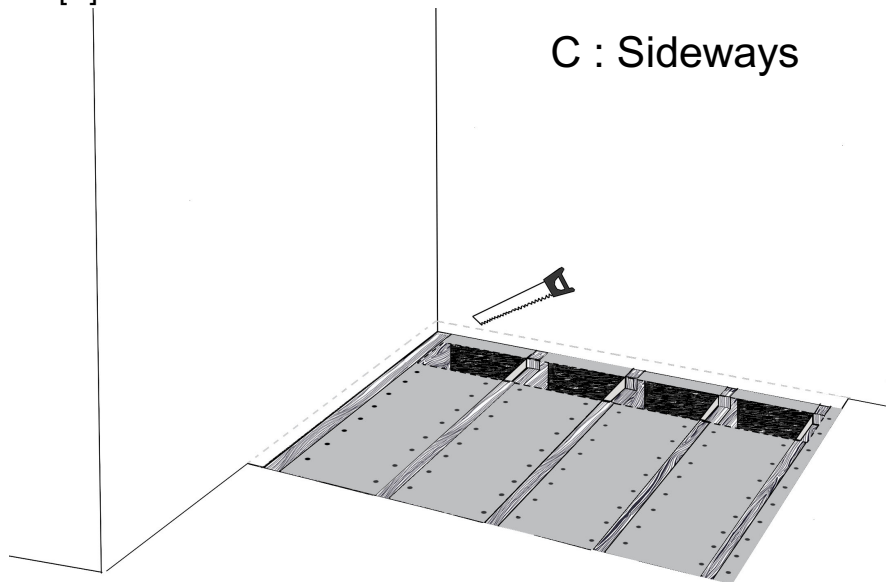


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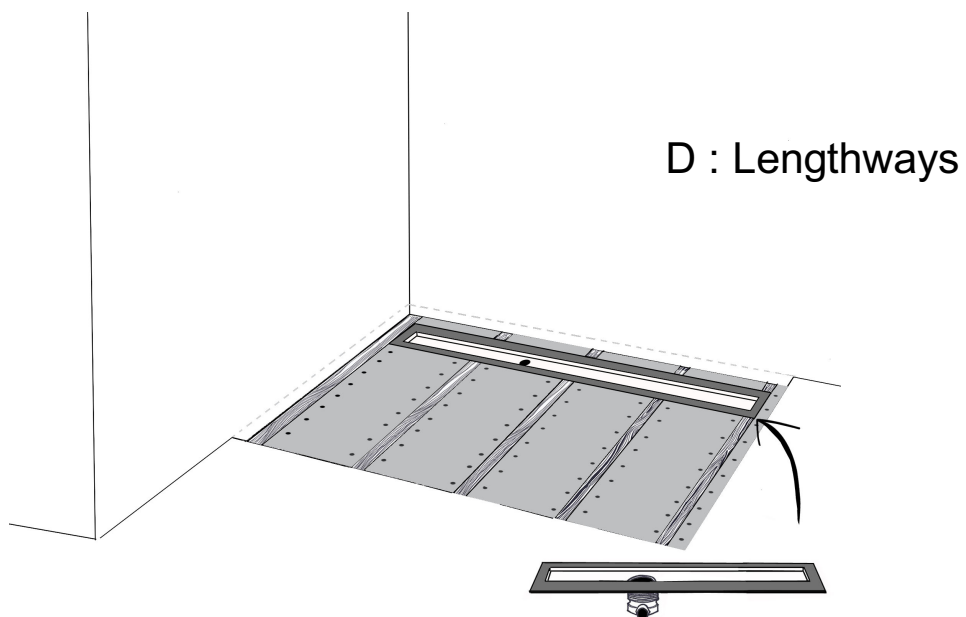
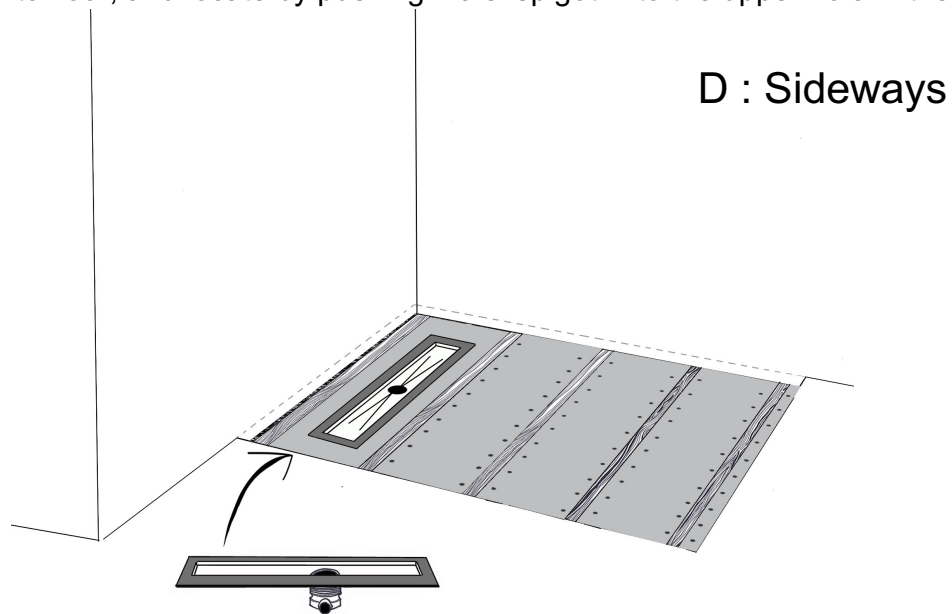
3. Decide on location of drain, cut hole to suit, ensuring the structural integrity of the floorboards remains intact.[C]



4. To support trap during installation & use, make supporting noggin that fits between joists. Fix at a height so top of trap is 20mm below the sub-floor height. Push trap into noggin block, & leave loose on noggin support.
5. Using outlet hole (in drain chassis) to identify waste (& therefore) trap position, connect waste pipe to soil pipe.
6. Trim waste pipe to suit, and connect to trap using DN50 > 2" adaptor where necessary.
7. Test water drains away from trap & waste pipes without any leaks.

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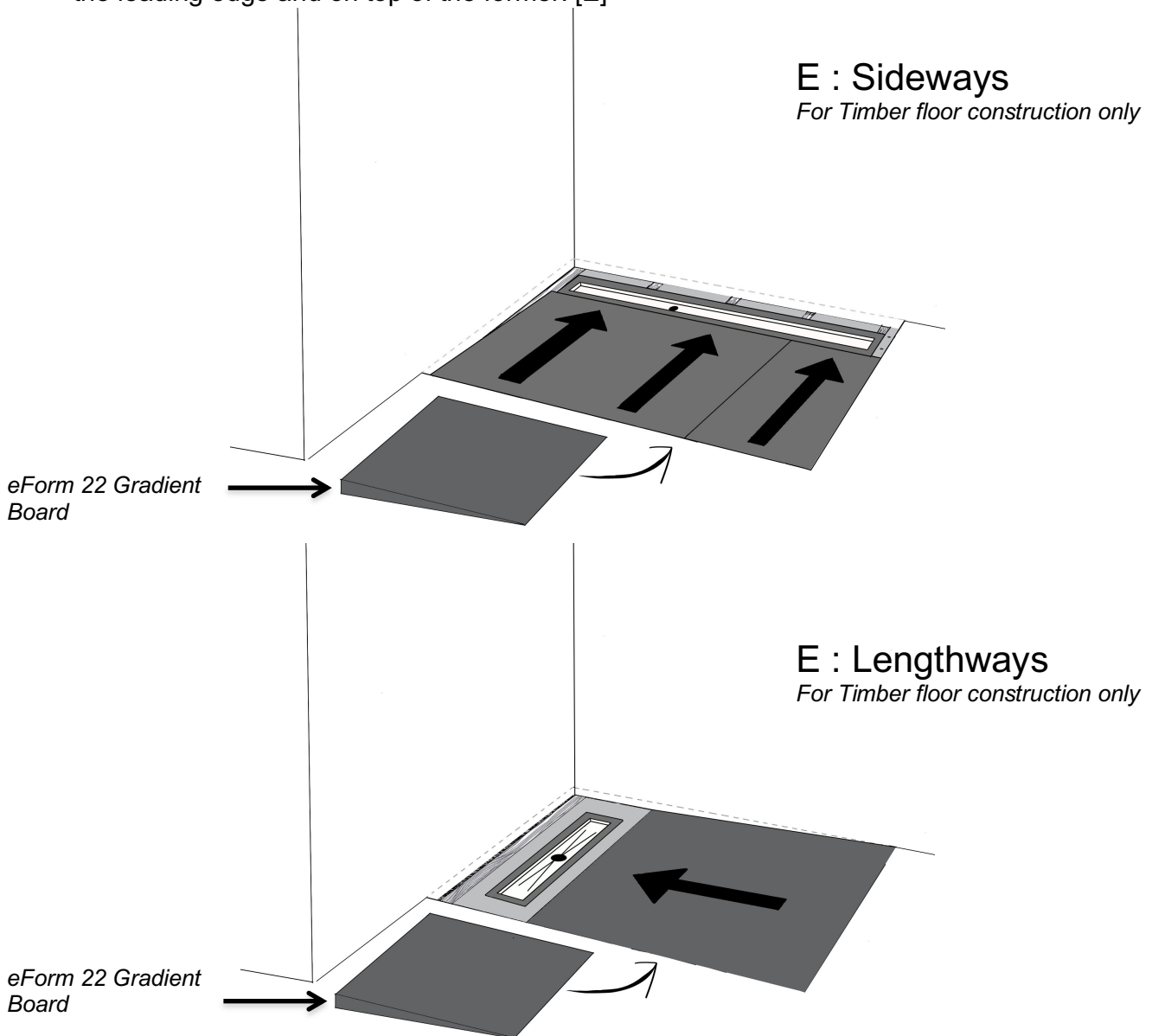
8. Fit chassis into floor, and locate by pushing male 'spigot' into the upper hole in the trap.[D]



9. Fold the membrane (ELITEpro & ELITEpro Stone) into the chassis, apply tile adhesive to the underside of the chassis flange, & firmly secure the drain into the correct position in the floor.
10. The flexible membrane should remain un-secured until later. [See 14]
11. Add weight to the chassis, & expel all air, to ensure the chassis is firmly adhered to the substrate.
12. Allow adhesive to set, ensuring the chassis is in the perfect position for future tiling.

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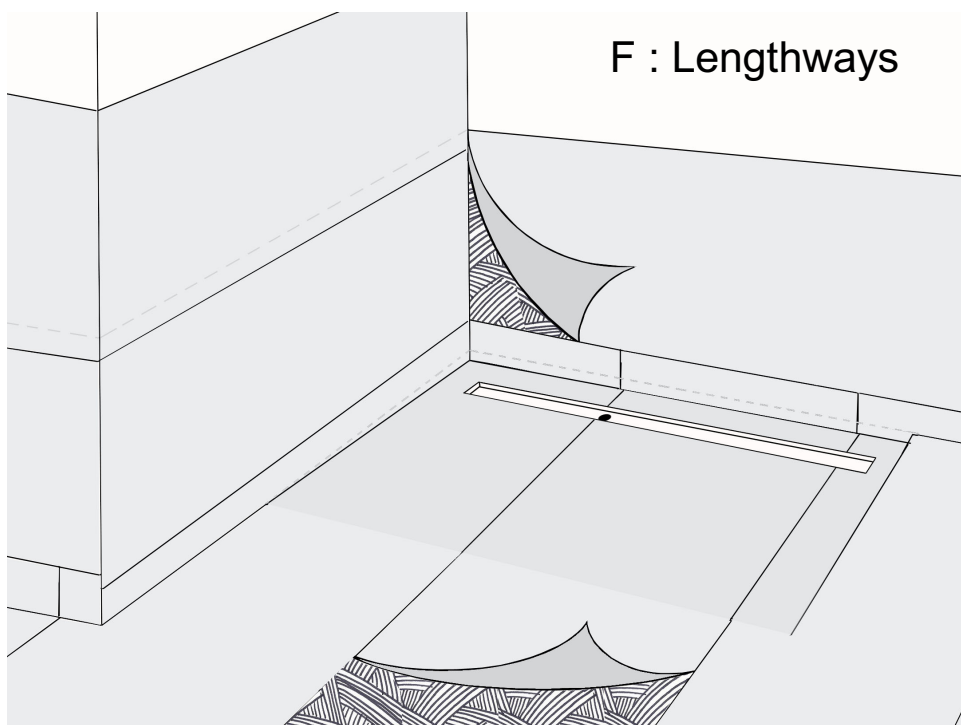
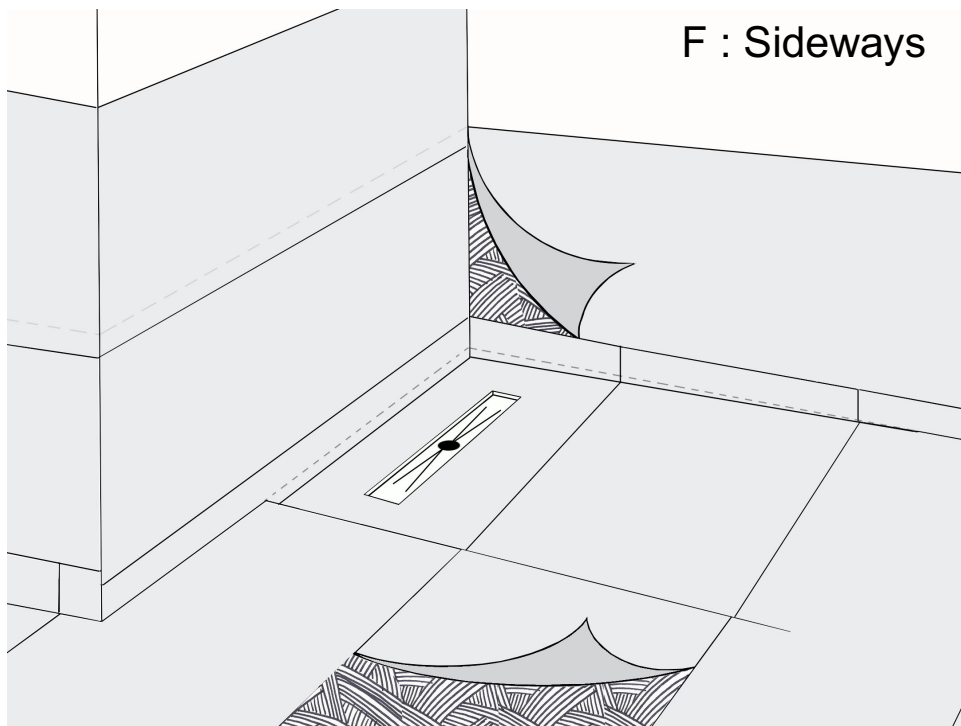
13. Create the correct gradient in the floor using the easy to trim eForm 22 range (Sold separately). NB – The floor former should be positioned so the flexible membrane laps over the leading edge and on top of the former. [E]



14. Unfold, & overlap flexible membrane from the chassis, so it can be fixed onto the upper surfaces of the eForm 22 gradient boards, or any other horizontal surfaces of the floor, and/or the vertical surfaces of the wall. Secure using tile adhesive, ensuring the drain chassis is completely sealing into the shower area structure.

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15. Waterproof the rest of the bathroom / shower floor & walls, using the matching AquaeGUARD, overlapping at least 50mm to create a seal. [F]



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16. When fixing the membrane to floor / walls, use a flat straight edge & run it over all membrane, squeezing out any air bubbles as they cause multiple problems when fitting the finish (Tiles or stone).[F]
17. Set the height adjustable frame, by re-positioning the levelling feet, to match the 'finished floor level'. Spares are provided should the originals get broken when re-positioning them. When choosing the height, ensure you allow for the application of tile adhesive, & the different thicknesses of floor finishing material you are using.**
18. Tile up to the support frame, covering the water seepage gap that offers secondary drainage from below the tiles.
19. Fit the grate. Either the flat stainless surface is uppermost, or insert matching tile/stone into the grate recess.

N.B - DO NOT seal the frame to the chassis, as the system is designed to allow any moisture that seeps below the tiles to escape into the drains.

* All reference to tile adhesive means a cementitious powder tile adhesive. As the membrane is air-tight, do NOT use 'Ready Mixed' tile adhesive as the air required for this to dry will not be present.

** N.B. - This product is designed for stone, tiles, or other rigid floor covering, & is not suitable for sheet vinyl flooring.

"THIS PRODUCT IS NOT FOR SALE IN GERMANY and we will not deliver it to purchasers in Germany. We understand that dealing in this product in Germany is likely to infringe German patent DE 10 2010 016 816 B4, and purchasers are advised not to import it into, or use, offer to sell, sell or otherwise dispose of it in Germany. We shall not be responsible for any liability, loss or damage suffered by any purchaser who does any of these things, and will seek indemnification from any such purchaser in respect of any liability, loss or damage we may incur as a consequence".

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Installation (Concrete Floors - Existing)

1. Identify Shower area.
2. Excavate floor where the drain, & the waste pipes will be fitted, deep enough to ensure the drain chassis will fit level with the 'un-finished' floor, once installed.
3. Identify waste pipe connection, install, & test the water flows away freely.
4. Connect waste pipe to trap, using adaptor. Use the Noggin Block as a stabiliser as necessary.
5. Fit the adjustable legs into the steel brackets (Optional Extra - Concrete Install Pack), and push fit them tight to the chassis.
6. Fold up the membrane (where fitted) into the chassis, and push the chassis (outlet) tight into the trap.
7. Using a spirit level as a guide, adjust the legs, to ensure the drain chassis is absolutely level.
N.B. : Concrete Install Pack legs are only for stabilising & levelling the chassis during installation, & are NOT for structural support.
8. Back-fill around, & underneath the drain with concrete, to ensure it is fully supported across 100% of its surface. Allow the concrete to set, & test load bearing ability.
9. Create a flat slope within the shower area, leading toward the drain. Excavating the shower area, & refill with concrete at the following gradient
 - a. minimum gradient :- 1%
 - b. optimum gradient :- 1.4% > 2%
10. Allow the concrete to fully dry, & test load bearing.
11. Unfold, & overlap flexible membrane, onto the upper surfaces of the newly created gradient, any other flat areas or walls, and secure using tile adhesive.
12. Waterproof the rest of the bathroom / shower floor & walls, using the matching AquaeGUARD, overlapping at least 50mm to create a seal. [F]
13. When fixing the membrane to floor / walls, use a flat straight edge & run it over all membrane, squeezing out any air bubbles as they cause multiple problems when fitting the finish (Tiles or stone).[F]
14. Set the height adjustable frame, by re-positioning the levelling feet, to match the 'finished floor level'. A set of spares are provided should the originals (set at xmm height) are broken when re-positioning them. When choosing the height, ensure you allow for the application of tile adhesive, & the different thicknesses of floor finishing material you are using.**
15. Tile up to the support frame, covering the water seepage gap that offers secondary drainage from below the tiles.
16. Fit the grate. Either the flat stainless surface is uppermost, or insert matching tile into the grate recess.

Installation (Concrete Floors - New)

Follow the above process, except replace points 1. & 2. With the following :-

1. Identify Shower area, mark out, & shutter prior to screed being poured.
2. Pour screed, also ensuring you allow for waste pipe runs.

N.B - DO NOT seal the frame to the chassis, as the system is designed to allow any moisture that seeps below the tiles to escape into the drains.

* All reference to tile adhesive means a cementitious powder tile adhesive.

As the membrane is air-tight, do NOT use 'Ready Mixed' tile adhesive as the air required for this to dry will not be present.

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