# Level-Grade

# Installation Guide For Vinyl Floor Coverings

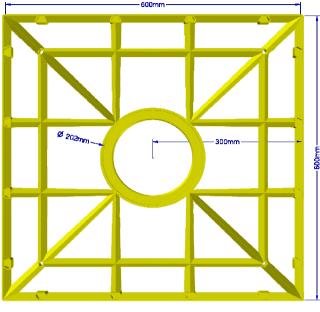
# Important please read these instructions fully before commencing with the installation

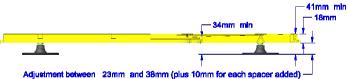
# **Contents**

- Components
- Kit sizes and dimensions
- General installation guide
  900mmx900mm / 1200mmx1200mm / 1500mmx1500mm
- Additional installation guidance for corner layout kits
  1050mmx1050mm / 1350mmx1350mm
- Additional installation guidance for all rectangular kits
  1200mmx900mm / 1500mmx1050mm / 1800mmx1200mm

# **Components list**

600mm starter section







# 450mm Straight section



300mm Straight section



# Corner section



# **General installation guide**

# Stage 1

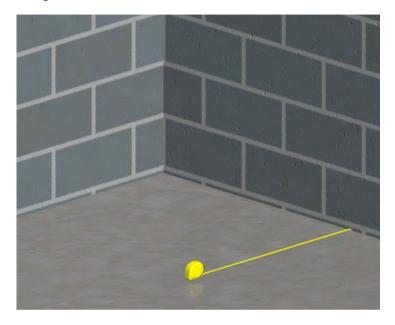


Ensure that the area where the Level-Grade is to be installed is clean and tidy.

If the installation is being carried out as a retro-fit the screed will need to be excavated to receive the Level-Grade.

Please see the illustrations on the previous pages for guidance on setup dimensions and drain positions.

## Stage 2



With reference to the illustrations on the previous pages measure out the area and identify the position that the floor drain and Level-Grade assembly will be located.



Excavate the sub-floor to accommodate the waste pipe and trap.

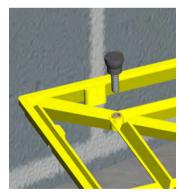
This may not be required in all installations as the drain pipe work may already be in place.

# Stage 4



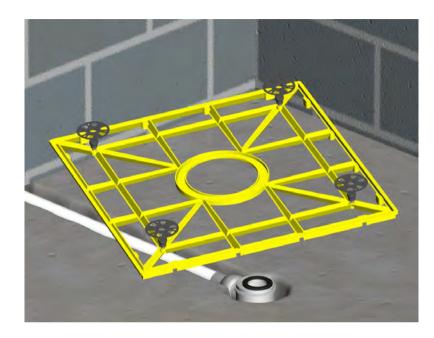
Install the trap and waste pipe as required.





Take four adjustable feet and attach to the 600mm starter section as shown. Screw the feet fully into the back of the starter section but ensure that the thread does not protrude beyond the top surface as this will cause problems later on in the installation.

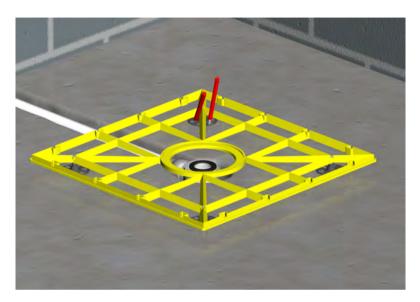
### Stage 6

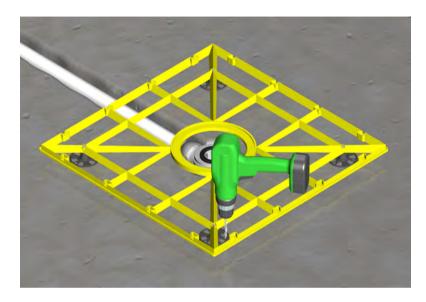


Attach four mounting foot plates to the adjustable feet previously fitted. This is a simple push fit process. **Ensure they are pushed firmly into place.** 

If the desired screed depth is greater than the outside course height shown on the appropriate layout diagram (see Pages 4-11) it may be necessary to add spacers to the Starter section and each successive course to increase the height in 10mm increments. In these circumstances spacers should then be added to the Starter section prior to fitting the mounting plates.





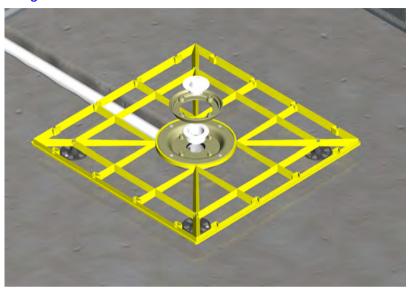




Position the 600mm starter section in the previously planned position. Make sure that the position is correct relative to the rest of the components in the assembly. Mark around the foot mounting plate and the fixing holes.



Drill the sub-floor and fix the mounting plate in place using screws and plugs provided. Only one screw is required for each mounting plate.



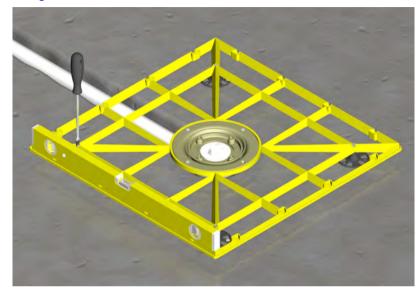
The floor drain can now be installed, this may vary depending on the type of floor drain being used. If an Impey floor drain is used please follow this procedure.

Drill a 50mm hole in the centre of the bowl to receive the trap.

Unscrew the 1 1/2" waste fitting from the trap , place the drilled bowl into the centre of the starter section, mark and drill the 4 fixing holes using a 3mm twist drill. Fix into place with the 3/4" self tapping screws supplied. Screw the waste fitting back into the trap using the tool provided. The tool must be left in place as it is also a protective cap to prevent debris entering the trap during the installation.

Ensure that the clamping ring is fitted to protect the screw holes from debris.

### Stage 10



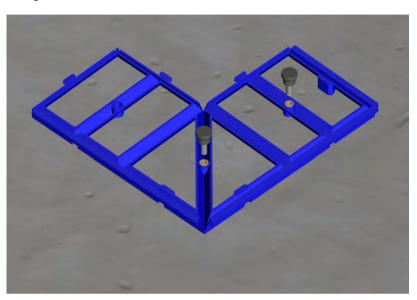
When all four mounting plates are secured the starter section will need to be levelled.

This is a very important part of the installation and must be carried out carefully.

Place a spirit level on the outer edge of the starter and adjust the foot height using a flat blade screwdriver until level.

This procedure is then repeated on the remaining three sides until the starter section is completely level.



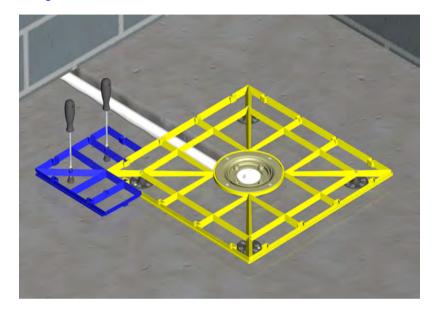


The installation is now ready to begin the assembly of the remaining components.

It is very important that you follow this procedure for a successful installation and always work in a clockwise direction.

Take a corner section and two adjustable feet, as with the starter section screw the feet fully into the corner to make the foot as short as possible.

# Stage 12



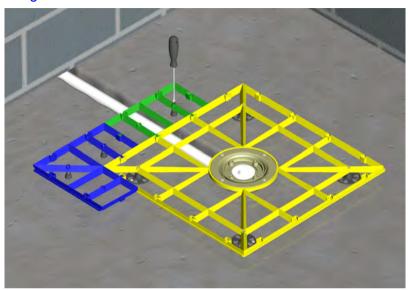
Connect the corner to the starter section and ensure that it is fully located and aligned.

Using a screwdriver screw the feet down one by one until they just contact the sub-floor.

# It is important that the corner is not lifted by the foot adjustment.

You may prefer to do the adjustment by hand as it can be easier to feel when the foot touches the floor.



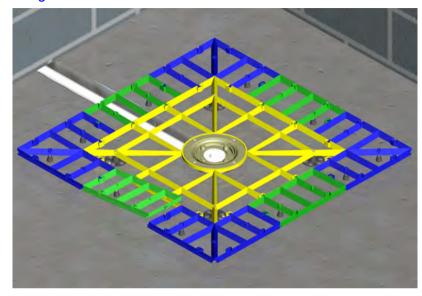


Take a 300mm straight section and screw one adjustable foot into place in the position shown above. The foot must be screwed in fully as described for the corner section.

Normally only one foot is required on straight sections, but certain assembly patterns require two feet to be added.

Connect the straight section to the assembly as shown ensuring it is fully located.

As with the corner section adjust the foot until it just touches the sub-floor, ensuring the it does not lift the assembly. Stage 14

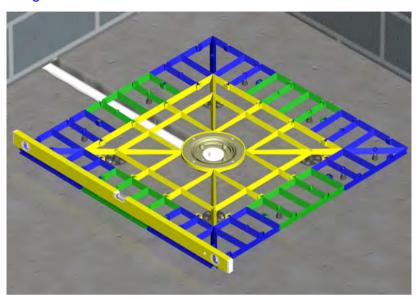


Continue building the assembly in the same manner until you reach the final part. Insert the final part as shown by angling into position,

this may require the adjoining section to be temporarily lifted in order to locate the final piece.

Before moving to the next stage ensure that all of the components are fully located and that all feet are only just touching the floor.





Check that this stage of the assembly is perfectly level around it's entire perimeter. Adjust if required.

If a 900mm x 900mm assembly is being used it is now complete. Please move to stage 24.

Stage 16

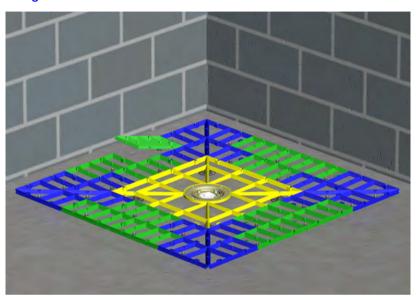


Begin building the second course of the assembly in the same manner as the first.

Depending on how level the sub-floor is you may need to add a foot spacer to the adjustable feet before continuing.

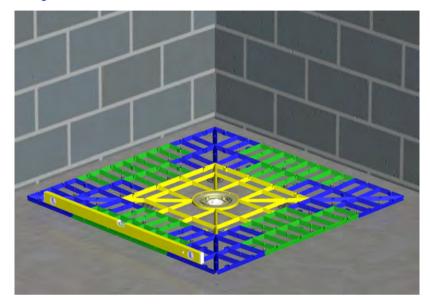
Fully locate the first corner and adjust the feet as before, ensuring that they just contact the sub-floor.





Continue building the second course as with the first. Ensure that all the components are fully located and that all the feet are just in contact with the sub-floor.

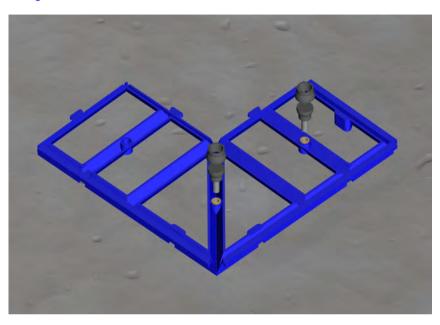
# Stage 18



Check that this stage of the assembly is perfectly level around its entire perimeter. Adjust if required.

If a 1200mm x 1200mm assembly is being used it is now complete. Please move to stage 24.





On beginning the third course take a corner section and fit the adjustable feet as shown and as previously carried out in other stages.

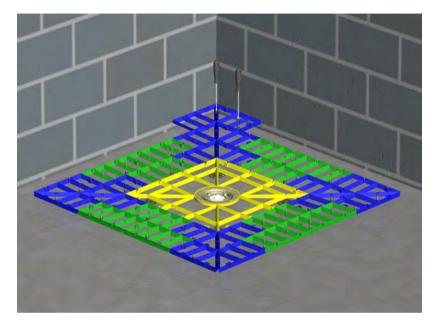
The third course will require spacers to be added to the feet regardless of the level of the sub-floor.

Spacers are used to give the feet extra length when the thread length is not long enough, typically this will be every two courses.

# Example;

Course 1-no spacer required Course 3-one spacer per foot Course 5– two spacers per foot

### Stage 20

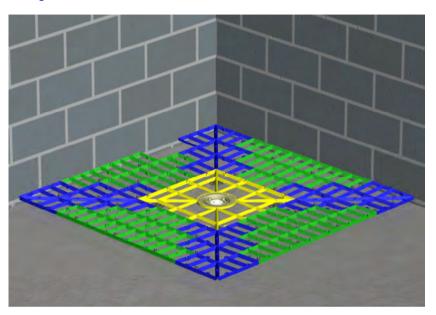


Begin building the third course of the assembly in the same manner as the first.

Depending on how level the sub-floor is you may need to add additional feet spacers to the adjustable feet before continuing.

Fully locate the first corner and adjust the feet as before, ensuring that they just contact the sub-floor.

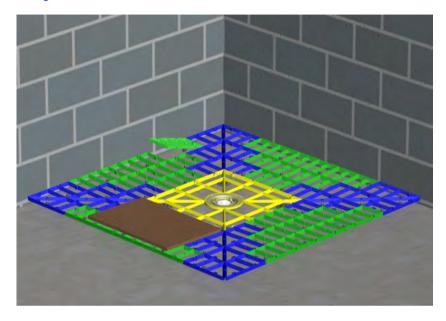




Continue building the third course as with the first and second.

Ensure that all the components are fully located and that all the feet are just in contact with the sub-floor.

# Stage 22

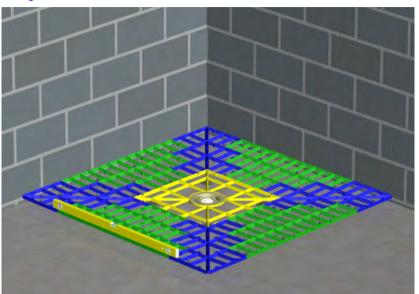


If the final part of this course is difficult to reach you may use a crawling board to spread your weight across the assembly making it easier to reach.

# Important

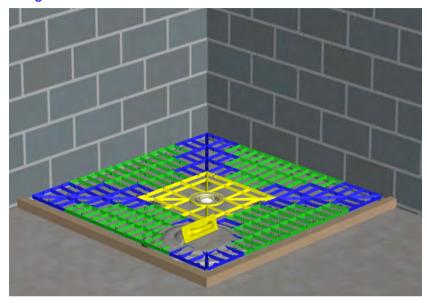
Exercise extreme care when putting weight on the Level-Grade assembly as it may disturb the levels previously set, or cause the assembly to become disconnected.





Check that this stage of the assembly is perfectly level around its entire perimeter. Adjust if required.

### Stage 24



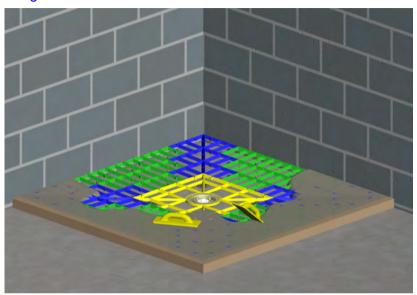
The Level-Grade can now be filled with screed. If the installation is carried out on a new build we recommend that the area of the Level-Grade is shuttered. This area of the screed should be laid separately to the rest of the floor screed.

Mix up the quantity of screed required, we recommend a fairly wet mix using a rapid setting cement at a ratio of 1 part cement to 3 or 4 parts sharp sand.

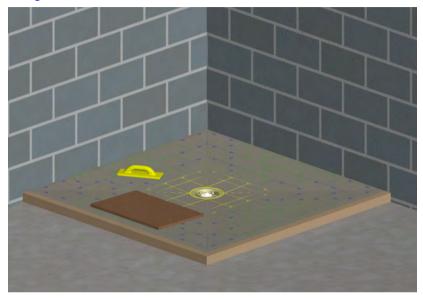
Because the mix should be wet the Level-Grade must be filled and allowed to cure until dry enough to finish trowel (curing time will depend on how wet the mix is, climate and cement manufacturers specification)

If a conventional dry screed mix is used it may be difficult to distribute the screed evenly throughout the matrix.



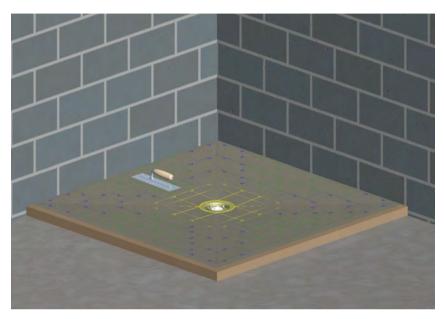


Start by gradually filling the Matrix, evenly spread the screed mix around the entire assembly. It is important to make sure the screed is worked well into the matrix and that is fully filled to avoid hollow areas in the screed. Stage 26



When the matrix is fully filled use a plastic or wooden float to rub the surface and reveal the peaks on the top surface of the Level-Grade.

A firm circular rubbing action on each surface of the gradient will give the best results, however the screed will need to have semi cured before a good finish can be achieved.



When the screed has cured enough the surface can be improved with a steel trowel/float if required.

# Stage 28



When the screed has dried out fully (in accordance with local building laws) the final floor finish can be applied.

# Additional installation guidance for Rectangular and Corner based square assemblies



fig. 1

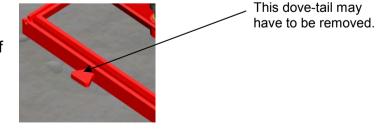




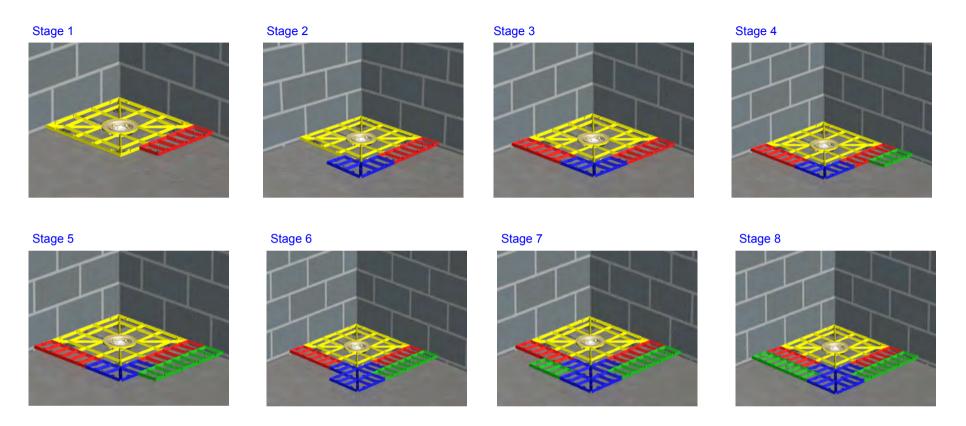
# Important; Please read if you are using LG2(1050mmx1050mm), LG3(1200mmx900mm), LG5(1350mmx1350mm), LG6(1500mmx1050mm) or LG8(1800mmx1200mm)

If you are using any of the above kit sizes it is important that the first section of each course (see fig.1) has two threaded feet attached. (fig.2 and fig.3) This is to ensure that the section is fully supported and only applies to the first piece of each new course started.

Additionally the male dove-tail on these first sections may need to be removed if the assembly is positioned close to the wall. The dove-tails can be simply snapped off using a pair of pliers.(fig.4)



# Additional installation guidance for corner square based assemblies (LG2 1050mmx1050mm and LG5 1350mm x 1350mm)

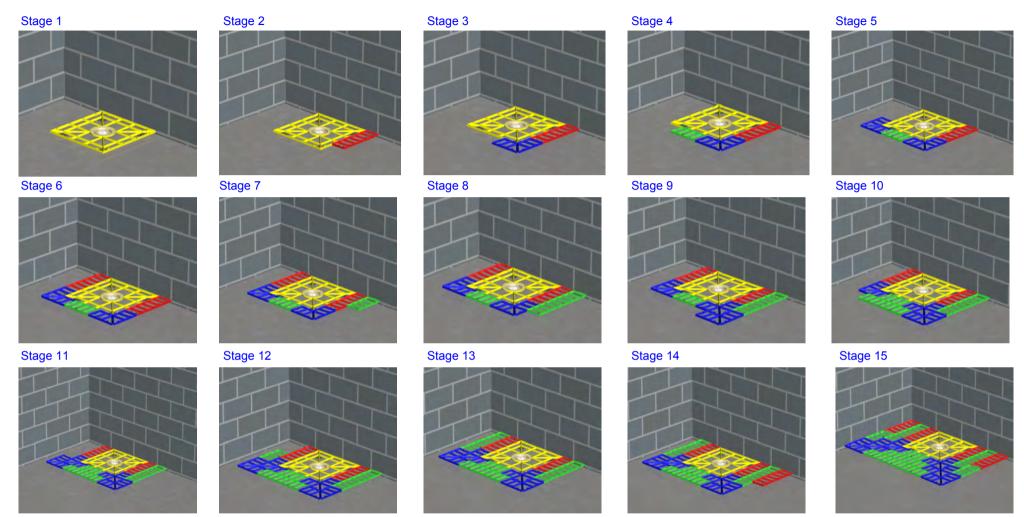


# Important; Please read page 25 of this guide before commencing the assembly.

For the above mentioned kits please use this assembly sequence, always start each course on the right hand side and work around in a clockwise direction.

For levelling and filling guidance please refer to the general installation guide.

# Additional installation guidance for rectangular based assemblies (LG3 1200mmx900mm, LG6 1500mmx1050mm or LG8 1800mmx1200mm)



Important; Please read page 25 of this guide before commencing the assembly.

For the above mentioned kits please use this assembly sequence, always start each course on the right hand side and work around in a clockwise direction.

For levelling and filling guidance please refer to the general installation guide.