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Inspecting floors and walls best practice

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# Best practice floors and walls installation: the do's and don'ts

We know that inspecting projects and addressing snags post installation can be difficult. With floors and walls the largest parts of an interior, there are multiple areas to consider. If you're inspecting a project, issues, and especially potential issues, aren't always obvious. If the worst happens and a system fails, it can be hard to understand why, even though the reason is, most likely, very straightforward. It's possible that the issue lies beneath the floor or behind the wall, but there are tell-tale signs you can look out for. With this in mind, we have put together a best practice guide to checking Altro floors and walls, once installed. The guidance and best practice illustrations are accompanied by examples of sub-standard installation to make it easy to identify problems.

We recommend, before work begins, meeting with your installer to go through the project and using this guidance to help you outline your expectations.

If you have any queries that are not covered here, please do call our technical hotline on 01462 489 516, or visit our website for further installation guidance, including videos and written guides. We also offer floors and walls installation training, details of which can be found on our website, or give us a call to discuss further.





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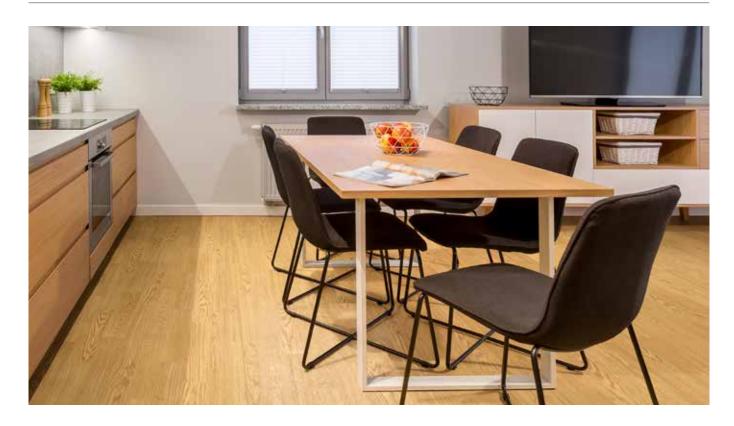
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# **Altro floors**



Altro floors enable you to meet challenges including sound reduction, cleanability, reducing slip risk, and design flexibility. It means we have a solution whether it's for a large communal space, or the smallest room within a home.

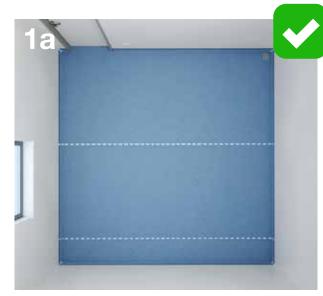
Our adhesive-free range, Altro Wood<sup>™</sup> Adhesive-free, Altro Cantata<sup>™</sup> and Altro XpressLay<sup>™</sup>, ensures it's possible to halve installation time, reducing disruption, and with 100% recyclability, it helps meet sustainability goals too.

We also have specialist safety floors for bathrooms, Altro Pisces<sup>™</sup> and Altro Aquarius<sup>™</sup>, that combine aesthetics with safety and easy maintenance.

Our floors have some of the longest guarantees in the industry, both for longevity and slip resistance, so in addition to the right technical performance and look, you can also have long term peace of mind.

# 1. Planning the area / placements of joints

Note: please ensure that the correct adhesive is used for the area in which the floor is being installed. We recommend AltroFix<sup>™</sup>19 Plus for wet environments and commercial kitchens, where there will be water and spillages. If there are signs that any other adhesive has been used eg. discarded tubs on site, check suitability.



# This shows the ideal layout of joints (seen from above).

#### Reason why this is good

It is aesthetically pleasing to draw attention away from the joint. It is placed away from the heaviest foot traffic.



This shows the joint in the middle of the doorway (seen from above).

## Reason why this is bad

Your eyes are drawn to the joint in the centre of the room, detracting from the aesthetics of the floor. The joint is exactly where most foot traffic goes, placing unnecessary pressure on the join.



This shows the joint placed well away from the drain.

## Reason why this is good

This provides a stronger weld, making it a more durable solution. The drain and floor are both secured, with no access point for water, bacteria and bugs.

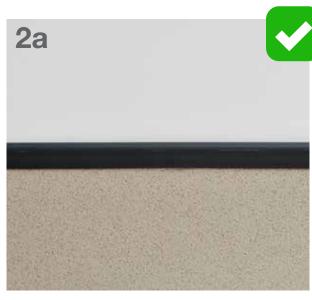


This shows the joint running across the drain.

#### Reason why this is bad

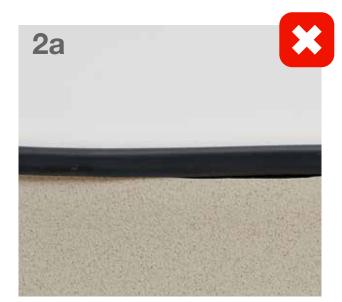
The drain and floor are not secured and the gap means there is potential for water, bacteria and bugs to get between the subfloor and flooring.

# 2. Capping - visual appearance



This shows a straight, level cap.

Reason why this is good A straight, level cap looks good, plus there are no gaps for water or dirt ingress.



This shows an uneven cap.

Reason why this is bad Not only is this not aesthetically pleasing but, because there are gaps, there is potential for water and dirt ingress, leading to system failure.

# 3. Capping - internal and external corners



This shows best practice capping for fitting of internal and external corners.

#### Reason why this is good

Internal corner: by cutting the capping and pushing it into the corner, it creates a better seal, making moisture ingress less likely. It also looks better. External corner: by taking a piece of the capping out and wrapping it around the corner, it creates a continual capping seal, with no gaps. This is less prone to damage and is aesthetically pleasing.



This shows poorly-fitted capping that has been mitred on the internal and external corners.

#### Reason why this is bad

Internal corner: the corners have been mitred, and gaps in the capping can be seen, which will allow moisture ingress. The overall look is poor. External corner: the capping will not be secure and water, bugs and bacteria could get into the gaps. It could also be prone to damage from passing foot and wheeled traffic.

# 4. Cove former

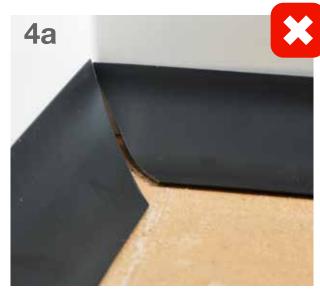
Tip – look for surface irregularities, which could indicate the cove former has not been joined properly. The images below show what could be going on underneath your flooring.



This show a best practice internal corner.

## Reason why this is good

The correctly fitted cove former gives the flooring greater support in the corners. The back section of the right hand piece has been trimmed off so that it firmly overlaps the left piece, leaving no void behind.



This show a badly cut and poorly fitted internal corner.

Reason why this is bad

Where there is a gap, the cove former offers no support to the flooring, making it susceptible to damage.



This shows a neat mitre with the cove former cut and fitted at the correct angle.

Reason why this is good Neatly cut and fitted with no gaps, the flooring is supported.



This shows a poorly cut and fitted cove former.

## Reason why this is bad

The gaps that result from the poor fit do not support the flooring that will sit on it. The floor will be susceptible to corner damage from wheeled traffic.



This shows a reduced cove former that will sit under the floor, next to the door frame.



This shows the flooring installed over a reduced cove former, next to the door frame.

## Reason why this is good

This ensures there are no gaps between the floor and the door frame. It looks good and no gaps mean no open areas for water ingress or bacteria.



This shows the cove former leading up to the door frame, with no reduction. It sits proud of the frame.

Reason why this is bad

Flooring that sits proud of a doorframe is prone to damage. The gap against the wall allows moisture and bacteria ingress.

# 5. Fitting Altro safety floors around a drain outlet

Note: at the planning stage, ensure that the correct drain is used for the installation



This shows the flooring folded in, with the drain fitted on top.

#### Reason why this is good

Folding the floor into a clamp drain ensures a tight, sealed fitting that prevents water and bacteria ingress.



This shows the flooring cut around the top of the drain, leaving gaps.

Reason why this is bad

The drain is not secured and the gap between floor and drain allows water, dirt and bacteria to get between the sub-floor and flooring. This is unhygienic and can cause the floor to lift.

# 6. Fitting Altro flooring around obstructions, such as pipework, doorframes, sanitary ware etc.



This shows a neatly cut floor, correctly sealed.

#### Reason why this is good

The sanitary ware and floor are neatly sealed with mastic, which looks good and is easy to clean. As there are no gaps, water and bacteria cannot get under the floor.



This shows a poorly cut floor with no seal between it and the toilet base.

Reason why this is bad With no seal, water and bacteria will get under the flooring, cleaning will be harder, and it doesn't look pleasant.

# 7. Welding

Note: we recommend using a hot weld rather than mastic. With mastic the floor join will not be as strong or longlasting and would be prone to damage. It also may not hold the floor securely and could leave a gap between the two edges of the floor.

Tip: to test if mastic has been used - it can easily be picked off with a fingernail and is slightly tacky.



This shows a best practice hot welded internal corner, with no gaps.

#### Reason why this is good

Hot welding supports the floor in the corner and ensures no gaps between the two pieces of flooring, preventing water, bug and bacteria ingress. This finish looks good too.



This shows a best practice hot welded external corner, with no gaps.

#### Reason why this is good

Hot welding supports the floor in the corner and ensures no gaps between the two pieces of flooring, preventing water, bug and bacteria ingress. This finish looks good too.



This shows an incomplete, poorly hot welded internal corner, with gaps.

Reason why this is bad

A poor weld leaves the corner prone to damage and the gaps allow water, bug and bacteria ingress. It is not aesthetically pleasing.



This shows an incomplete, poorly hot welded external corner, with gaps.

#### Reason why this is bad

A poor weld leaves the corner prone to damage and the gaps allow water, bug and bacteria ingress. It is not aesthetically pleasing.



This shows a best practice floor weld with no gaps and trimmed correctly.

# Reason why this is good

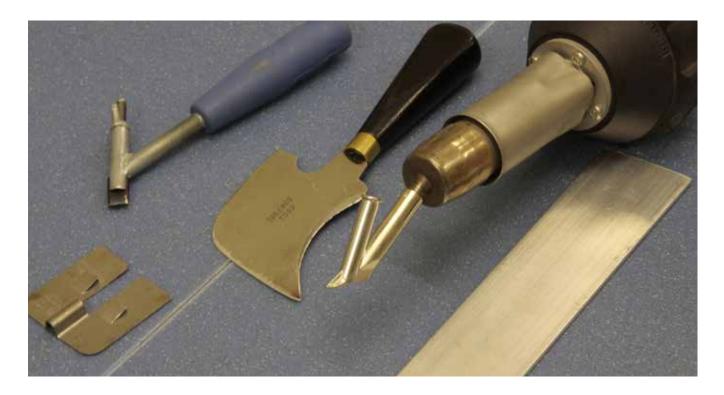
A neat, straight weld with no gaps either side of welded joint and trimmed correctly, ensures a secure floor with no dirt traps that is aesthetically pleasing.



This shows a poor, untrimmed floor weld with gaps.

#### Reason why this is bad

There are gaps and it is unfit for purpose. A weld that hasn't been trimmed down to the surface of the floor, will create dirt traps. The look isn't good and draws the eye to the joint.



# **Altro walls**



We have been developing walls systems for nearly 40 years, so when tell you that our walls have up to 20 years' guarantee, that's not just a number, it's a promise.

As with our floors, Altro walls meet different requirements for difference spaces, for example, the Altro Walls ShowerKit<sup>™</sup>, a complete shower walls system that's easy to install in small spaces.

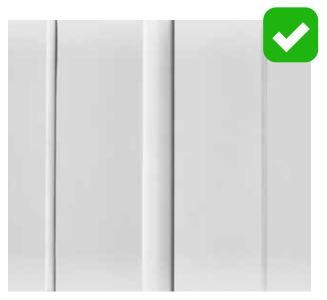
Altro Whiterock<sup>™</sup> hygienic wall cladding is available in multiple shades and finishes to create the right look for the right room - and each option can simply be wiped clean, ensuring easy maintenance for both tenants and cleaning teams.

Altro Fortis<sup>™</sup> wall, door and corner protection copes with the knocks and bumps of daily life, ideal for communal areas where pushchairs, wheelchairs and bags are a regular feature. And again, they are easy to maintain, keeping spaces looking good for longer.

Altro floors, walls and doors are designed for the people using them, backed with technical support before, during and after installation, but how that installation is carried out is key. It's a bit like going to play a guitar and finding out the strings have been put on in the wrong order: your tune won't sound good and the performance isn't what anyone was expecting! The following pages will show you what to expect when you inspect an installation and why.

# **Options for trims and welds**

Note: discuss the type of jointing methods that is most appropriate for your project with your installer at the planning stage.



This shows the different joining methods (from left to right): Altro Flexijoint, joint trim and welded trim.

Reason why this is good Straight perpendicular lines are aesthetically pleasing.

# 1. Planning the area and placement of joints

Tip: when planning the layout of the sheets, it is best to minimise the number of joints in the walling system. Ensure joints do not fall too close to corners; we suggest joints should not be formed any closer than 300mm from a corner.



This shows well-aligned wall sheets, with the joints at a good distance from the corner and in line with the door corners.

## Reason why this is good

This room has been planned well, with good joints in the corner, doorframe and window reveal. The look is balanced and aesthetically pleasing.



This shows the wall sheets with a joint too close to the corner and a join in the middle of the doorway.

#### Reason why this is bad

The joint in the corner of the room is closer than the recommended 300mm from a corner. Your eye is drawn to the joint above the doorway. The joints look unbalanced and aesthetically unpleasing.

# 2. Placement of joints - windows

Note: if thermoforming the window sill, look for joints in line with the window frame edge and into the window reveal. If not thermoforming the window sill, ensure neat and close joints, finished with a thin bead of mastic.



This shows the joint strips in line with the window reveals.

Reason why this is good The window looks neat and balanced.

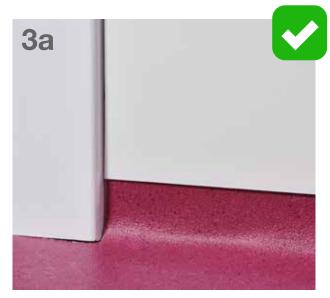


This shows a wall sheet fitted around a window with too many joints.

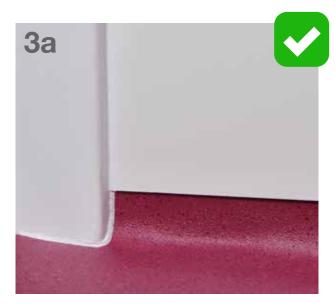
Reason why this is bad

Your eye is drawn to the join in the middle of the window. The look is unbalanced and aesthetically unpleasing.

# 3. Joints and cuts around doorways



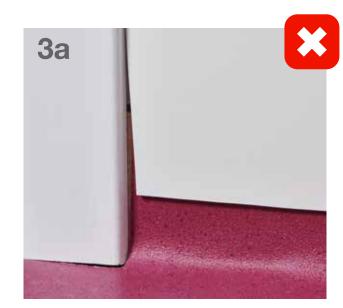
This shows a neat finish with the recommended 3mm gap, ready for sealing.



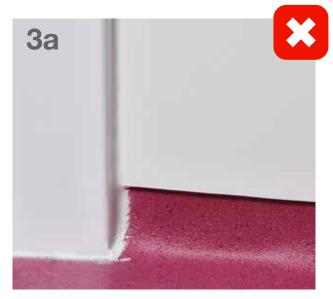
This shows a 3mm gap, neatly sealed with mastic.

#### Reason why this is good

A thin, neat edge, approximately 3mm, sealed with mastic, will prevent the ingress of dirt, bacteria and bugs. It is less likely to fail as a joint and is aesthetically pleasing.



This shows a wide gap between the floor and wall sheet, and between the wall sheet and the door frame, allowing water, dirt and bugs to get behind.



This shows a wide gap between the floor and wall sheet, and between the wall sheet and the door frame, filled with thick mastic.

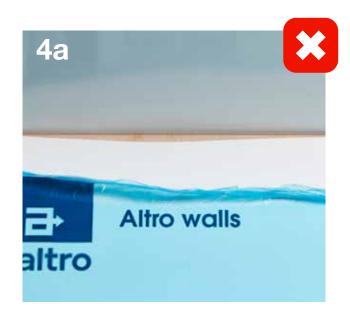
#### Reason why this is bad

Thick mastic could indicate the cover up of a massive gap, that the wall sheet was not cut properly, or that the room was not planned properly. A thick layer of mastic is likely to fail, which could allow ingress of dirt, bacteria and bugs. Aesthetically, it doesn't look good.

# 4. Mastic around perimeters of Altro Whiterock – ceilings, walls, floors, doors



This shows Altro Whiterock joining a ceiling with a 3mm gap.



This shows a deep gap between the ceiling and wall sheet.



This shows a 3mm gap, neatly sealed with mastic.

## Reason why this is good

A thin, neat edge, approximately 3mm, sealed with neat mastic is less likely to fail as a join, preventing the ingress of dirt, bacteria and bugs. Aesthetically, it looks good.



This shows the large gap filled in with thick mastic.

## Reason why this is bad

Thick mastic could indicate the cover up of a massive gap, potentially not cut properly, or because the room was not planned properly. It is also likely to fail, which could allow ingress of dirt, bacteria and bugs. Aesthetically, it doesn't look good.

# 5a. Fixtures and fittings - non-hygienic environment

Note: in a hygienic environment, we would advise to mastic seal the edge - see diagram 5b.



This shows the fitting overlapping the Altro Whiterock sheet.

#### Reason why this is good

The fitting overlapping the wall sheet is neat, tidy and aesthetically pleasing and is ideal for a non-hygienic environment.



This shows a deep gap between the fitting and wall sheet.



This shows the large gap filled in with thick mastic.



This shows a 'make-do and mend' approach. The sheet has been cut too short for the plug socket, so another piece of Altro Whiterock has been used to overlap the gap.

Reason why this is bad

A thick mastic, a wide gap or using additional wall sheet around a fitting shows poor planning and doesn't look good.

# 5b. Fixtures and fittings - hygienic environment



The fitting overlaps the wall sheet and is finished with a thin 3mm bead of mastic.

## Reason why this is good

The fitting overlapping the wall sheet is neat, tidy and aesthetically pleasing, with a thin mastic seal (approximately 3mm) around the edge to prevent bacteria and bug ingress.



The sheet has been cut too short for the plug socket and thick mastic has been used to fill the gap.

## Reason why this is bad

By not having the overlapped edge, there is potential for bacteria and bug ingress. Thick mastic around a fitting is not aesthetically pleasing.

# 6. Joints and cuts around pipework and protrusions – air-con vent ducts, heating pipes etc.

Tip: we recommend a 3mm approximate gap as this allows for any expansion around pipework and protrusions. For an extremely hot, or steam, pipe, leave a 3.5mm gap to allow for expansion.

Note: ideally, any protrusions would be away from joints to make the wall more aesthetically pleasing.



This shows a neatly cut, even sheet, with the recommended 3mm gap.



This shows the sheet, with a bad uneven cut. In parts it is wider than the recommended 3mm gap.



This shows pipework coming out of the wall sheet, sealed with neat mastic all the way round.

#### Reason why this is good

A thin, tight gap around the pipework looks good. A thin bead of mastic should be applied around any pipework or protrusions to create a neat and tidy seal (the mastic allows for movement).



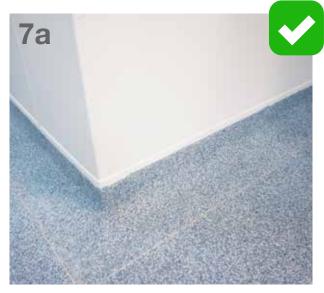
This shows an uneven, thick mastic seal with a gap on one side.

#### Reason why this is bad

Messy mastic is not aesthetically pleasing, and any gaps allow bacteria and bugs access.

# 7. Wall corners

Tip: to ensure there are no voids in the corners of what should be a fully bonded hygienic system, knock or tap on the corners to detect hollow spots. These voids leave Altro Whiterock vulnerable to damage and also allow potential bacteria to grow.



This shows best practice for an Altro Whiterock thermoformed corner.

## Reason why this is good

A secure, fully-bonded, flush fitting against the wall ensures the strength of the system. In hygienic environments, it prevents potential bacteria growth.

8. Wall trims - checking the appropriate ones for the area



This shows someone testing the wall to check that it's fully bonded.

Reason why this is bad

If the wall sheet is not fully bonded, bacteria could grow in the gaps, and the system is more vulnerable to damage.

# 8a

This shows an installed single-part trim.

#### Reason why this is good

It is generally not possible to remove a single-part trim by hand. This is particularly important in mental health spaces where a removed trim could be fashioned into a weapon or instrument of self-harm.

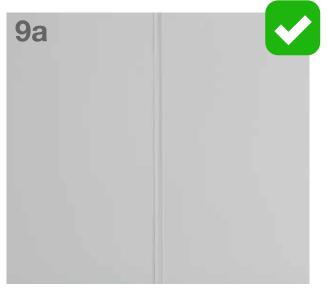


This shows a two-part trim being lifted at the base.

#### Reason why this is bad

The two-part trim can be removed and potentially adapted into any type of weapon or instrument of self-harm.

# 9. Welding



This shows a clean joint; it has a good weld with no scratches.

Reason why this is good The joint looks neat and clean and will last longer.



One of the advantages of installing both Altro safety flooring and hygienic wall cladding is that it creates a complete, impervious system. Because this protects against water ingress and there is nowhere for dirt or bacteria to hide, it is a popular choice for kitchens and wet environments.

For the system to work as it should, how the flooring and wall cladding join is VITAL. The right choice is either a concealed transition strip which creates a nice curve and is often chosen for areas where looks are a factor, or a twopart transition. For anywhere that water will be present regularly, a full watertight seal should be achieved, hence the use of a concealed transition is a must!

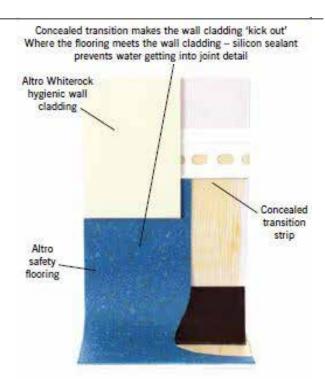
When neither the concealed transition strip or the twopart transition strip options are used, the flooring would be laid first, then the wall cladding installed. The wall sheet would be adhered to the flooring, where it would overlap the floor by 50mm. If the flooring then needs repairing or replacing, it has to be cut away. The only way to finish the job would be to seal the two, which doesn't look good, wouldn't necessarily keep out water and other contaminants and could fail completely. – (see 10b – 'bad installation' option).



This shows a poor weld, with gaps and scratches on the wall sheet caused by tools.

#### Reason why this is bad

It's an example of poor installation. The weld will likely fail, allowing dirt, bacteria and bugs to ingress, and it's not aesthetically pleasing.



It was the case that the concealed transition would only be specified for showers and the two-part for anywhere else. Now, because the concealed transition looks so much better and guarantees an impervious system, it's by far the better choice, whatever the project.

# 10a. Jointing of Altro walls to Altro floors with the recommended method of using a concealed transition strip

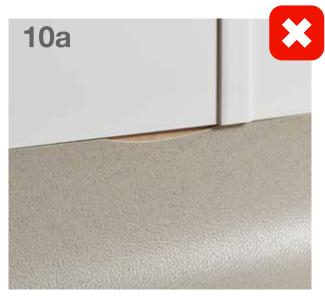
Note: this is the preferred method for all wall to floor installations, enabling any flooring to be easily replaced in the future without disturbing the Altro wall sheet.



This shows an installation completed using a concealed transition strip. The wall overhangs the floor and is sealed with mastic.

### Reason why this is good

Using a concealed transition means that the flooring doesn't need to be installed first. It makes the wall cladding 'kick-out' at the bottom so the flooring can go underneath and sit behind it. This means the wall sheet isn't adhered to the flooring behind, so it's easy to replace the flooring if needed. This type of transition means that any water runs down the wall and onto the flooring rather than hitting the join. After this, the transition is silicone-sealed to avoid water bouncing back up from the floor and getting into the joint detail, creating a watertight finish.



This shows flooring unevenly cut to meet the wall sheet. A concealed transition strip has not been used.

#### Reason why this is bad

This is not a sealed system, allowing for water and bacteria ingress and a potential failure of the system.

# 11. Fitting captile strip prior to wall tiles and floor finishes

Note: a captile strip is the interface between the bottom row of any wall tiles and the top edge of coved-up flooring.

Tip: one thing to consider is that the captile strip is invariably fitted by the wall tiler, so it may be worth discussing fitting requirements with them before work starts.



This shows neatly mitred internal and external captile corners.



This shows both the internal and the external captile corners have been tightly mitred and finished neatly with a small amount of mastic.

## Reason why this is good

In a wet environment eg. a shower room, this will allow water to drain away easily, without it getting behind the flooring material. This prevents system failure and provides a hygienic solution that is also aesthetically pleasing.



This shows poorly jointed internal and external captile corners, with visible gaps.



This shows poorly jointed internal and external captile corners, filled with thick mastic.

#### Reason why this is bad

In a wet environment, water will run down the wall tiles and can find its way behind the captile strip, mastic and flooring. This could cause a system failure and is not aesthetically pleasing.

# **12. Altro Walls ShowerKit<sup>™</sup>**

The kit includes everything you need to install around a shower tray or a bath and includes: Altro Whiterock wall sheet, adhesive, silicone sealant and trims.

Note: The Altro Walls Showerkit has been designed to be easy to install, even in small spaces such as domestic bathrooms.

Tip: look for sealed joints, neat cut trims and tidy mastic.



Left-hand side: this shows that the bath/shower trim is fitted tightly to the shower/bath top. The joints are finished with mastic to prevent water ingress.

Reason why this is good

A correctly-fitted, neat, thin mastic-sealed edge will prevent water ingress, be easier to clean and will prevent system failure. Right-hand side: this shows Altro Whiterock overlapping a shower tray upstand and finished with tidy mastic to prevent water ingress.

# 13. Altro Whiterock Digiclad<sup>™</sup> (Custom)

Tip: ensure images on the panels match and line up (installer should check this before fitting). If digitally printed trims are being be used, ensure that the trims meet the specification for the area of usage ie. if an area is for mental health, use a single-part joint and not a two-part joint (generally, the single-part trim cannot be removed by hand and fashioned into a weapon or instrument of self-harm).



This shows two Altro Whiterock Digiclad sheets correctly lined-up, with a matching trim in place.

**Reason why this is good** Aligned and aesthetically pleasing.



This shows two Altro Whiterock Digiclad sheets installed with a poorly aligned matching trim (take a close look at the bridge!).

# Reason why this is bad The misaligned trim spoils the overall effect of the image.

# Samples

If colour choice is critical, please request a sample of the material

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