

NO ROOM FOR WATERPROOFING PROBLEMS





Home is where the heart is, home is where happiness knows no bounds, home is where love flows effortlessly and a place that you want to come back to at the end of the day.

But as much as you need your home, your home needs you too. Protect it from all leakage related problems using SmartCare range of waterproofing products from Asian Paints.

In this guide, you will find precautions and solutions that you can take to keep your home safe from interior dampness, exterior dampness, cracks, gaps, tile fixing issues and will make sure that your home has no room for anything else but you.



NO ROOM FOR CRACKS

Cracks

Cracks in your walls aren't just ugly, they can be warning signs for very serious problems in your home too. They can affect the beauty of your walls and overall foundation of the house. These can be in the plaster or the structure altogether.

What causes them?

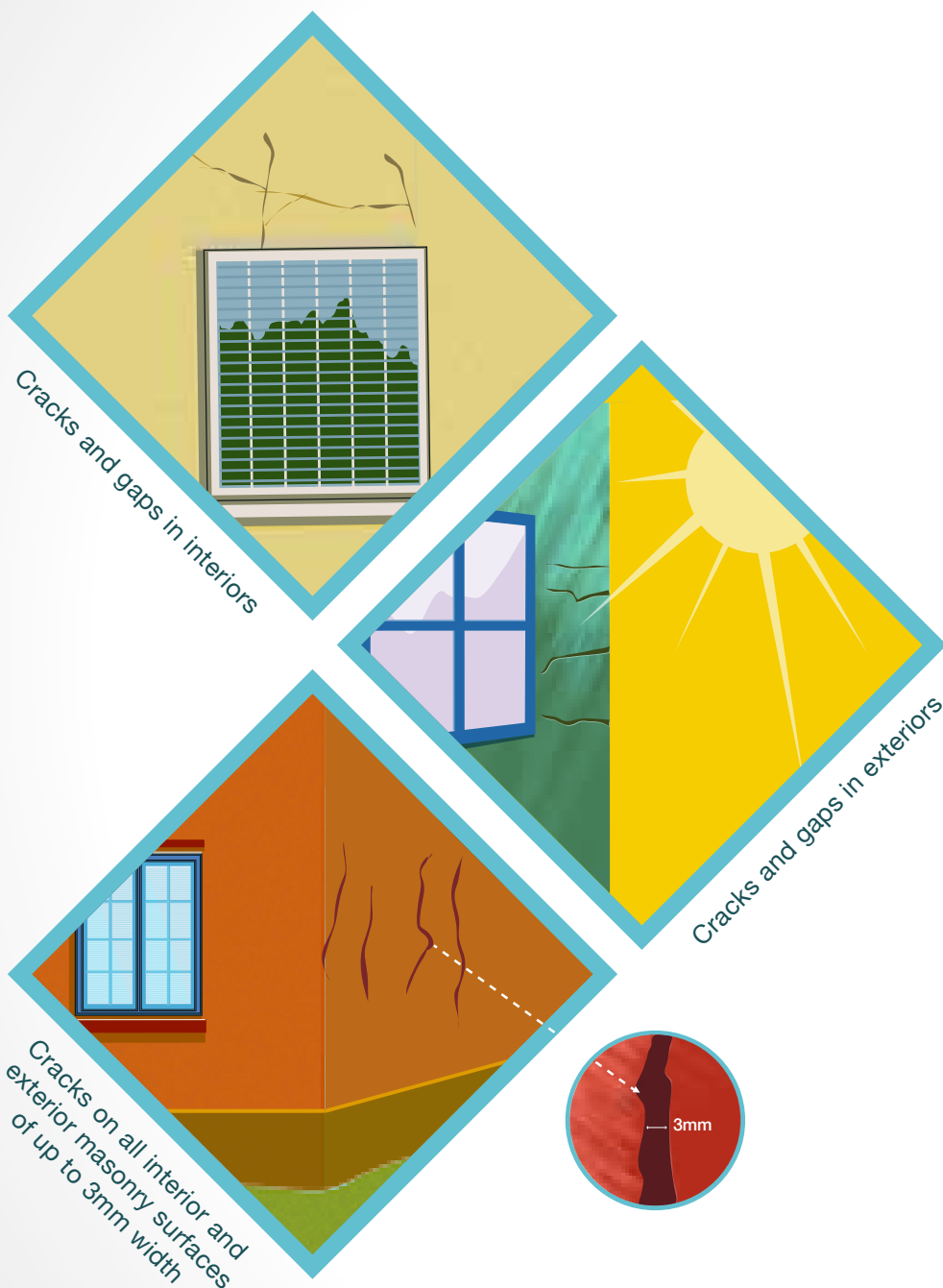
Some cracks are normal and come from the natural aging process of a home. When it comes to cracks, horizontal ones are more indicative of trouble. Cracks due to improper plastering or structural issues are generally found in load bearing areas.

Why treat them?

Cracks need to be treated because they can allow water to seep in from outside into the walls and damage the structure with dampness. It's even more critical to treat structural cracks because if water enters them, it can damage the load bearing part, which can make the entire structure weak. In fact structural cracks that occur due to incorrect design, faulty construction or overloading may endanger the safety of a building altogether so it's necessary to treat them.



AFFECTED AREAS OR AREAS TO BE TREATED



CRACK SEAL

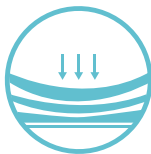


Asian Paints SmartCare Crack Seal is a single pack fiber-glass reinforced crack-filling compound for both interior and exterior surfaces. It comes as a ready-to-apply white coloured paste.



Crack Bridging:

Strong filling capacity for plaster cracks of up to 3mm width.



Flexibility:

High elongation film that accommodates minor movements.



Mechanical Strength:

Strong fibre-glass reinforced film does not let cracks reappear.

Product Features & Benefits



Waterproofing:

Water-resistant film stops water entry through cracks.



Low Shrinkage:

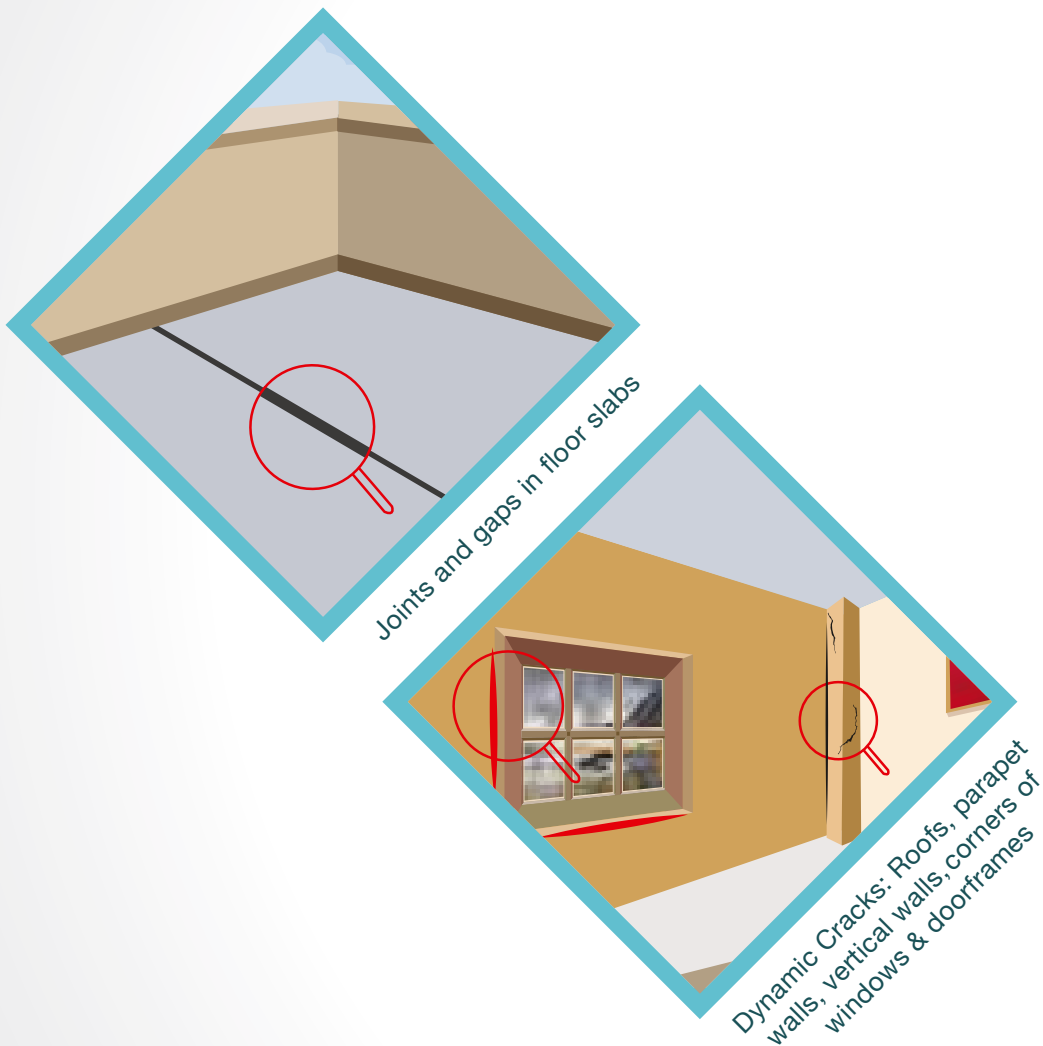
Does not leave a mark after painting.



Usage:

Single ready-to-use pack and easy-to-apply product.

AFFECTED AREAS OR AREAS TO BE TREATED



HYBRID PU SEALANT



Asian Paints SmartCare HYBRID PU SEALANT is a single component, durable & silylterminated polyurethane sealant for sealing of dynamic joints and cracks.

Product Features & Benefits



Environment friendly



Excellent adhesion



Gap filling
Can be used for joints up to 40mm.



Flexible
Allows join movement up to +/- 25%.



Paintable

NO ROOM FOR TERRACE LEAKAGES

Terrace Leakages

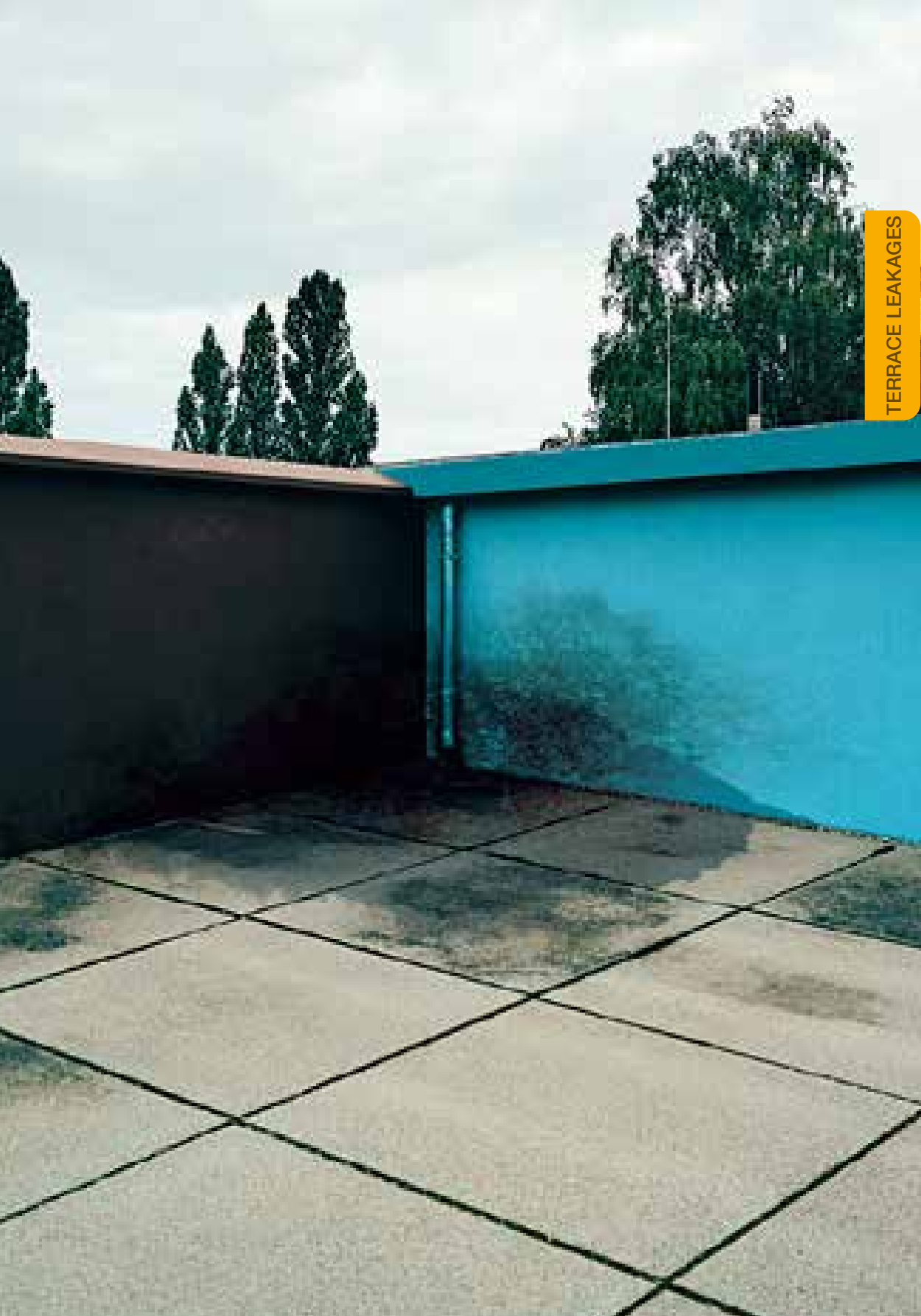
Terrace indeed is the most important part of your house. A properly constructed and well-maintained terrace has an effective life of around 30 to 50 years. But leakages play a silent demon to it, causing damage and deterioration of the overall life of the roof, thus weakening the integrity of the structure altogether.

What causes it?

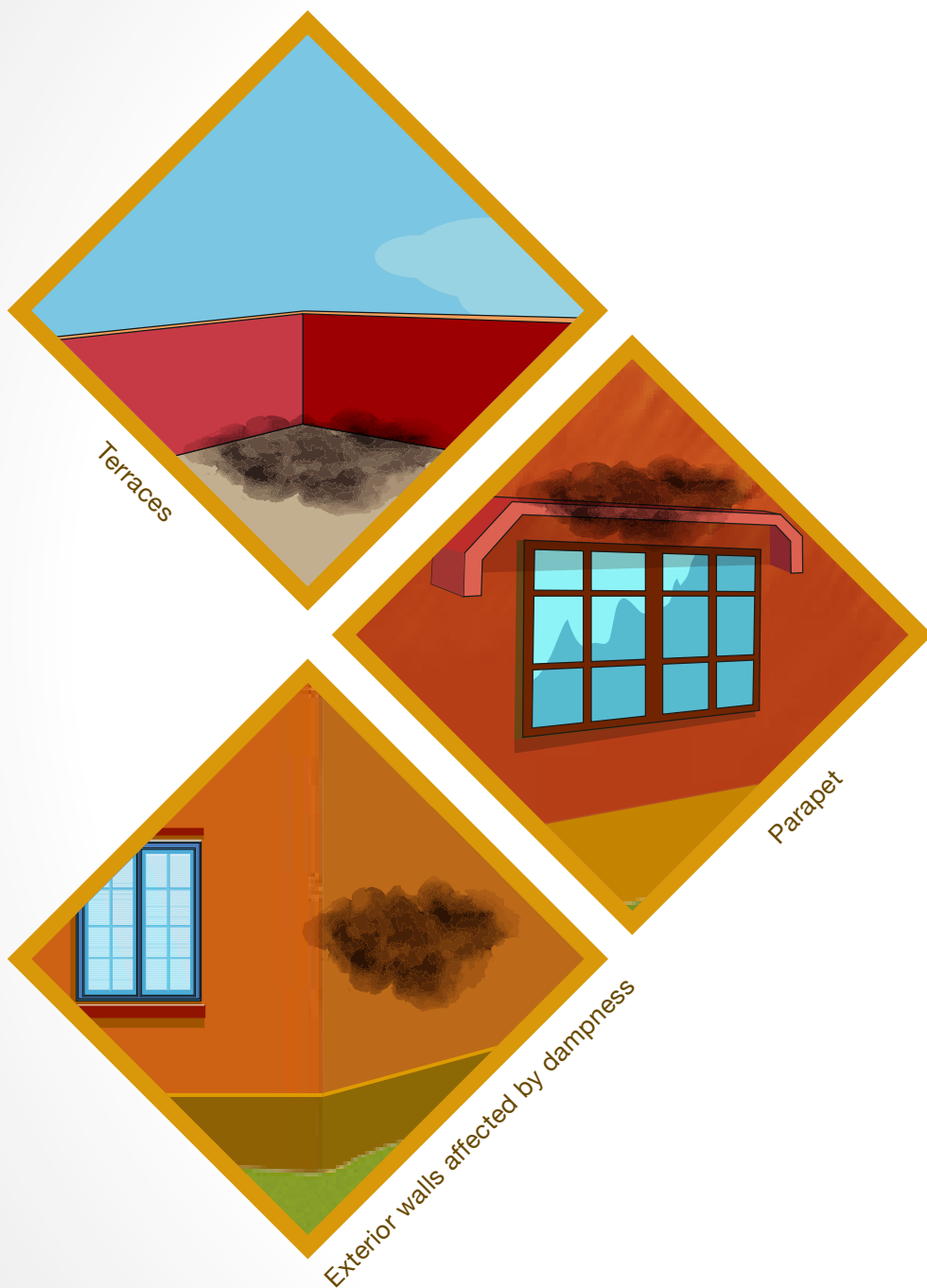
Leakage and seepage can be caused by improper slop, clogged drainage pipes, cracks and damages on the terrace slab, resulting in standing water on the roof which leads to seepage and leakage on the floor below.

Why treat it?

Dampness damages much more than a building's appearance. The simplest and most effective way to safeguard your roof from water damage is through regular checks and monitoring. For best protection, these should be coated with water-proofing coatings otherwise the interiors of your house may also get affected by it.



AFFECTED AREAS OR AREAS TO BE TREATED



DAMP PROOF



Asian Paints SmartCare Damp Proof is a fiber-reinforced elastomeric liquid applied waterproof coating. Upon curing, it forms a seamless, durable membrane to offer excellent waterproofing.



Waterproofing

Waterproofing protection of up to 7 bars hydrostatic pressure from the positive side.



Crack Bridging:

High film elongation allows excellent crack bridging ability for cracks up to 0.8mm on terraces and 2mm on vertical walls.



Anti-Carbonation:

Protection against carbon dioxide and chloride ion diffusion to maintain the strength of the structure.



Heat Proof:

Brilliant white coat and high Dry Film Thickness (DFT) of 650 microns results in high heat reflection that result in cool interiors.



Mechanical Strength:

Fibers in the coating offer very strong mechanical properties and abrasion resistance to the film.



Ease of Use:

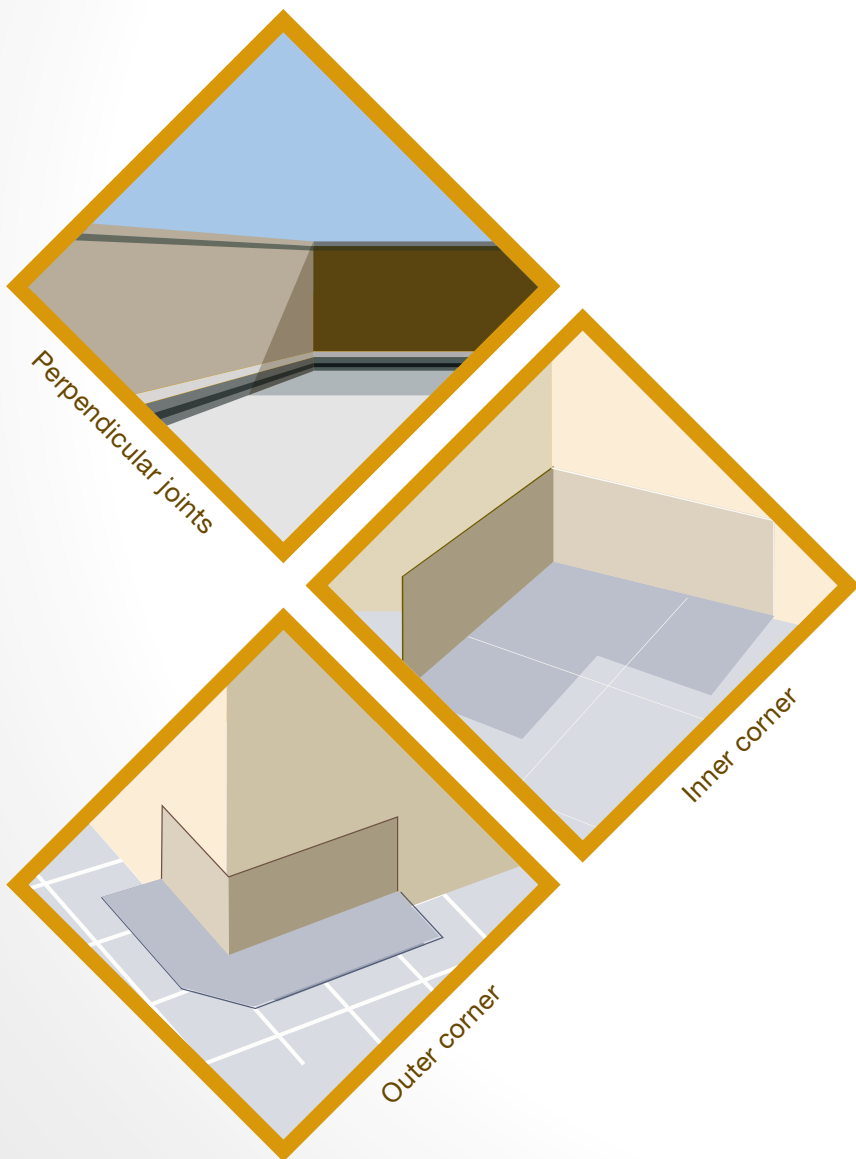
Single pack, easy-to-apply and simple recoating for maintenance.

Product Features & Benefits

Additional Reinforcement for Terrace Corners and Joints

Terrace corners, parapet walls and other perpendicular joints (as shown in the picture below) are prone to cracks because of expansion and contraction of walls due to weather changes and general vibrations that may affect a building. These cracks then allow water to seep through them and reach the interior ceilings causing dampness.

Thus, Roof Tapes come handy as an additional reinforcement to the Damp Proof films so that there's no leakage from such cracks.



JOINT TAPES



Asian Paints SmartCare Roof Tapes are intended for waterproofing and sealing of parapet joints, terrace joints, walls connecting joints and other construction joints and cracks. It is specifically for residential areas, which exhibit normal and reduced stress (expansion). This product composes advance elastomer EPDM rubber, which is characteristic of very good elasticity and viscosity.

It's required to be applied along with Asian Paints Damp Proof.

The system together ensures best in class and long lasting waterproofing. For a detailed application procedure, please refer to the application procedure on page:



Flexibility & Strong Reinforcement

Very good flexibility to withstand and accommodate movements in the structure.



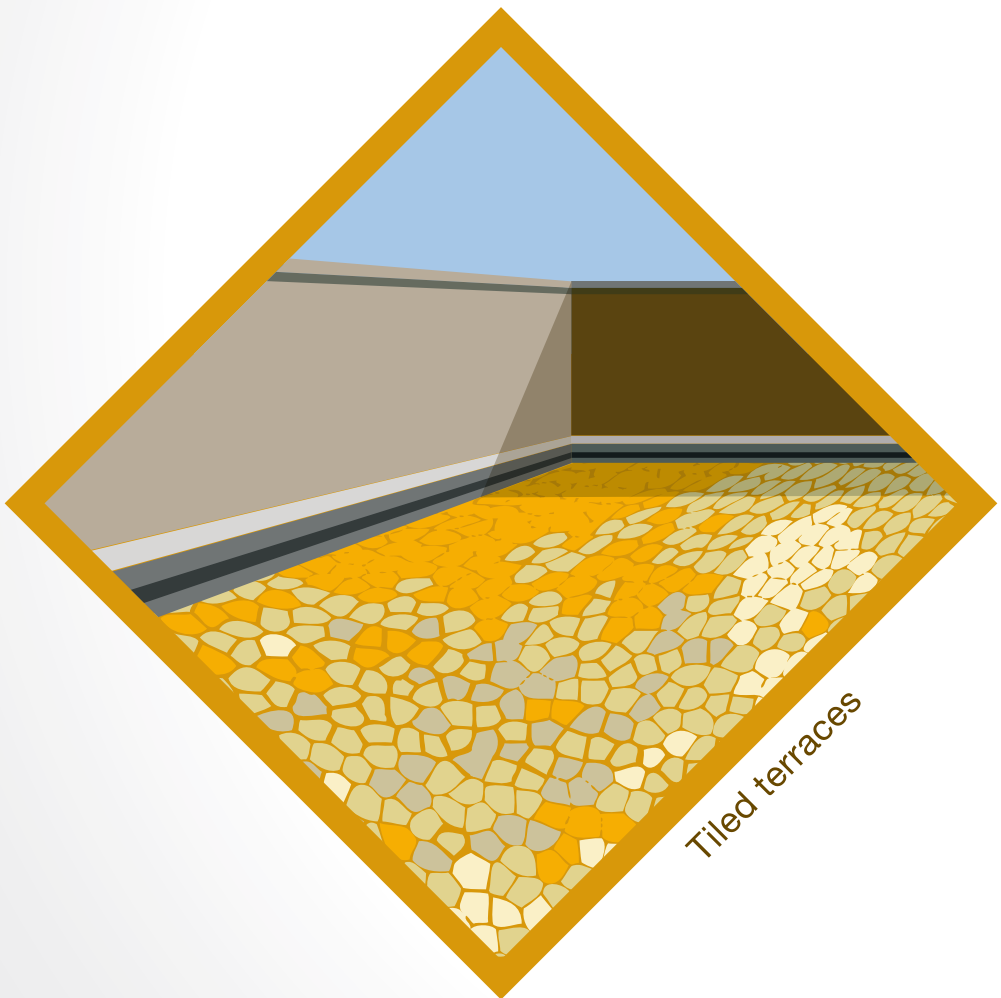
Weather Resistant

Strong resistance to heat, UV radiations and chemicals.

Product Features & Benefits

For Damp Proof Coating on Tiled Terraces

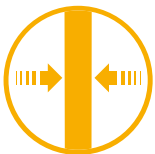
Waterproofing a tiled terrace is difficult because of its extra smooth and glazed finish. Adhesion of any waterproofing coat to such smooth surface is difficult hence a primer coat is required to facilitate a better adhesion. Damp Proof coating to such tiled surface can be done by applying a single coat of Terrace Tile Primer directly to the tiled surface. This can then be coated with Damp Proof as per standard application procedure.



TERRACE TILE PRIMER



Asian Paints SmartCare Terrace Tile Primer is water based acrylic primer for terraces having porous and non-porous substrates such as existing china chips, tiles or old paints, and sealed or burnished concrete terrace roofs. This is a single component hybrid polymer-based primer, which provides excellent adhesion to SmartCare Damp Proof.



Superior Adhesion

Good adhesion to all types of glazed tiles and china chips.



Easy To Apply

Doesn't require any dilution, can be brushed and rolled directly

Product Features & Benefits

NO ROOM FOR INTERIOR DAMPNESS

Interior dampness

The beauty of your house depends upon how ageless its walls look. But dampness plays a silent demon and takes away from the elegance of a properly constructed and beautifully painted wall. It may cause damage and reduce the overall life of the walls, thus weakening the integrity of the structure altogether.

What causes it?

Dampness is caused by leakage from washrooms, gaps in tiles, improper slop, damp exterior walls and water collected on the floor in areas where water table is high.

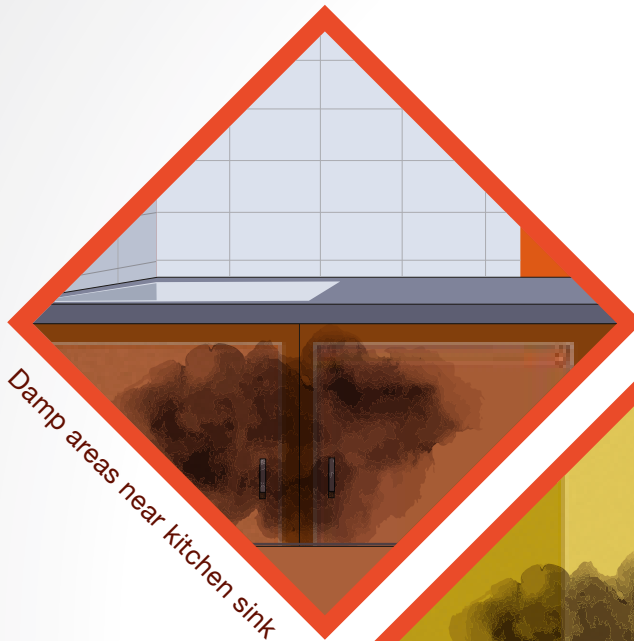
Why treat it?

Dampness can affect the beauty of your walls and can further breed bacteria to cause various health problems during the rainy season. It can also cause damage to the structure by weakening it.

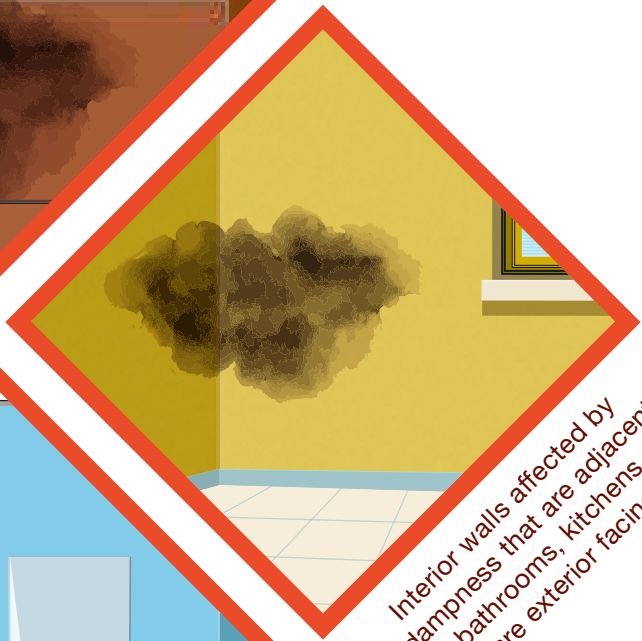


INTERIOR DAMPNES

AFFECTED AREAS OR AREAS TO BE TREATED



Damp areas near kitchen sink



Interior walls affected by dampness that are adjacent to bathrooms, kitchens or are exterior facing



Dampness on walls adjacent to bathrooms

DAMP BLOCK



Asian Paints SmartCare Damp Block is a flexible polymer modified cement based anti-dampness coating for interiors. It is a single pack white coloured powder that is easy-to-apply and offers lasting protection from dampness.



Waterproofing:

Resists 4 bars of hydrostatic pressure from the negative side.



Nanotechnology:

Nano sized particles enter smallest of pores and crevices to block water from coming out.



Crystalline Technology:

Reacts with water and forms crystals to effectively block water.

Product Features & Benefits



Adhesion:

High tensile and excellent bond strength with cementitious substrates.



Ease of Use:

Single pack and easy-to-apply.



Ease of Use:

Single pack, easy-to-apply and simple recoating for maintenance.

NO ROOM FOR WEAK STRUCTURES

Weak Structures

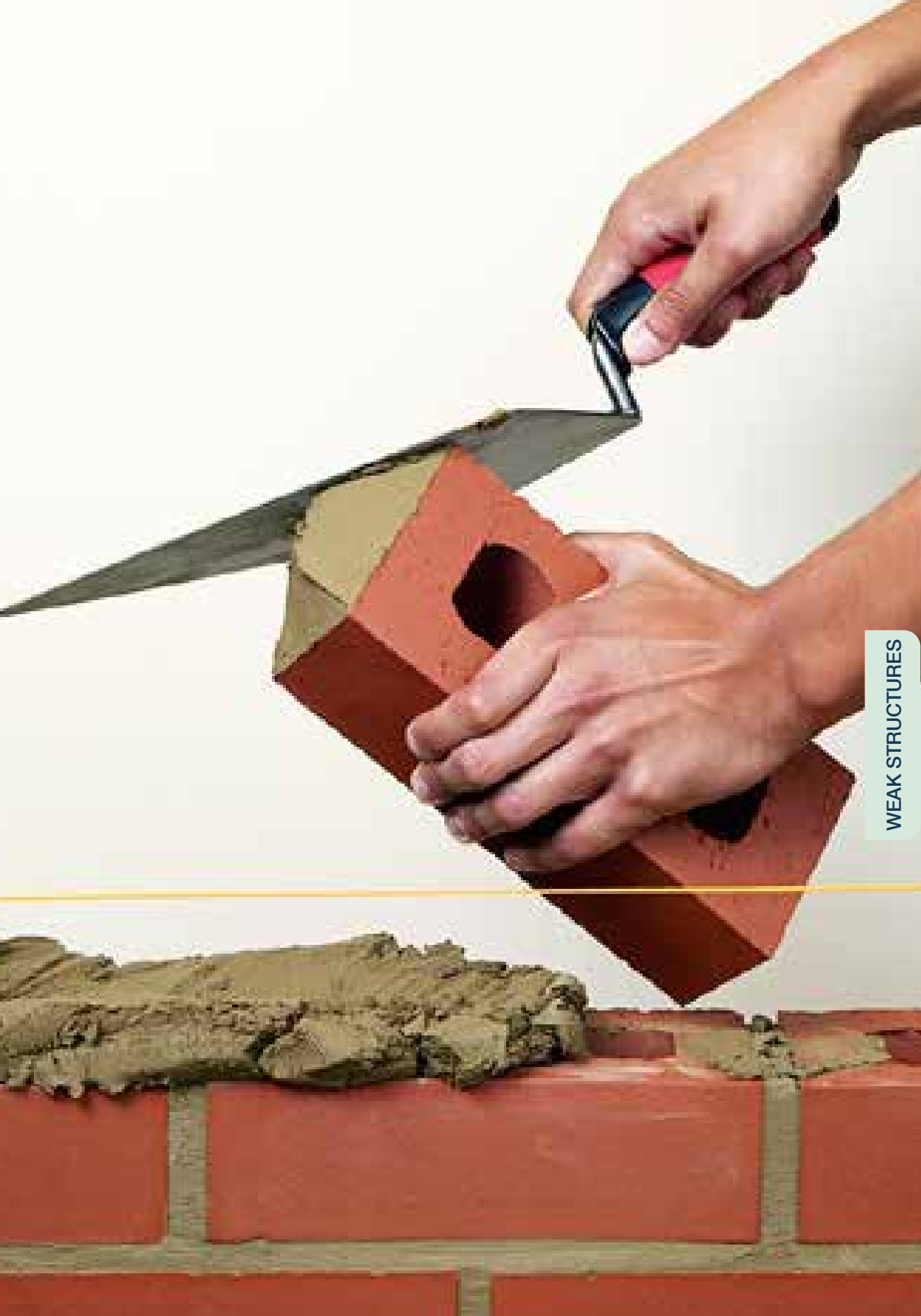
Your home stands on structures that are put together with cement-concrete, mortar and plaster. If water is allowed to seep through them, it will cause dampness, corrosion and further weaken its compressive strength. Thus, lower the water permeability; more is the strength of your structure.

What causes them?

During construction, masons tend to increase the ratio of water to the cement they're applying in order to get a good workability of the mix. This leads to reduced strength of the structure and causes shrinkage cracks in the structure when the cement dries out. Water seeps in through these cracks and further causes corrosion of the reinforcement bars.

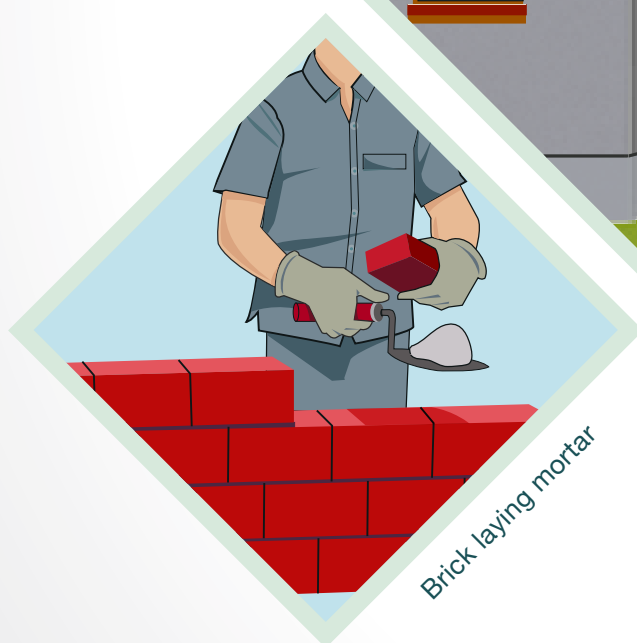
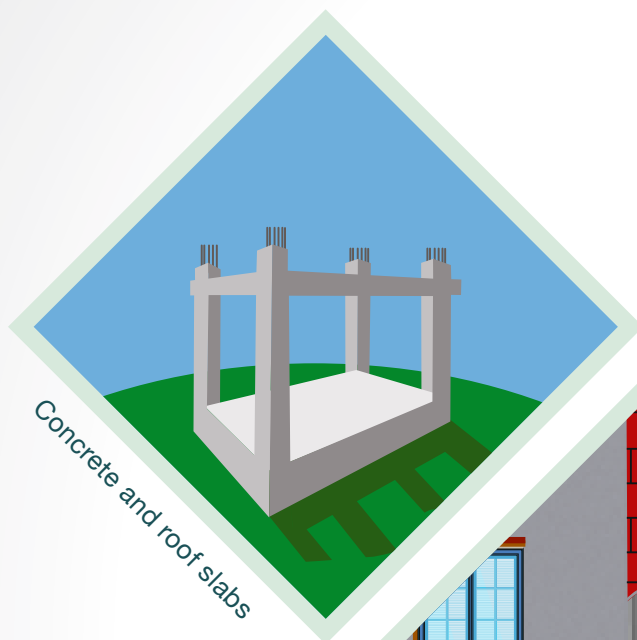
Why treat them?

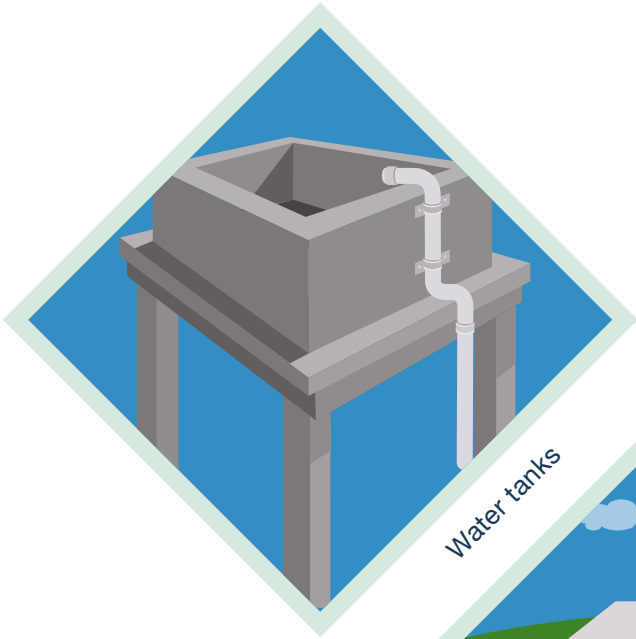
Structures with crack formation due to drying and shrinkage weaken very quickly and don't stand the test of time. The strength of these structures is less as seepage makes its way through the cracks.



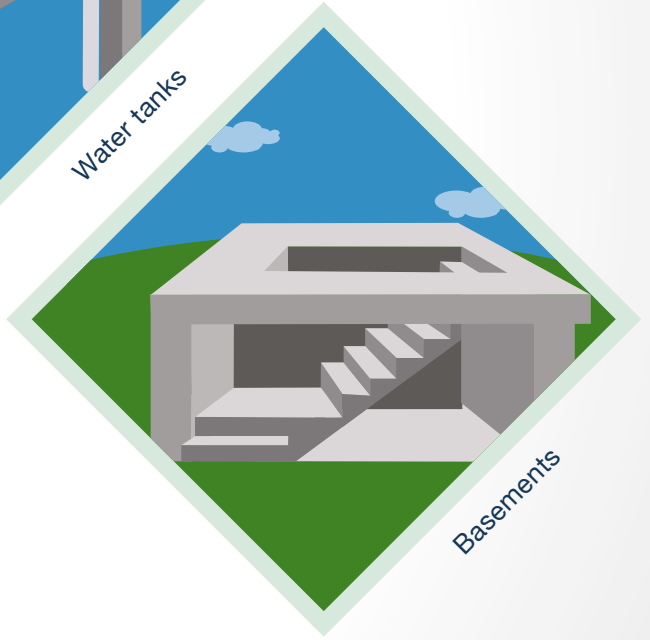
WEAK STRUCTURES

AFFECTED AREAS OR AREAS TO BE TREATED



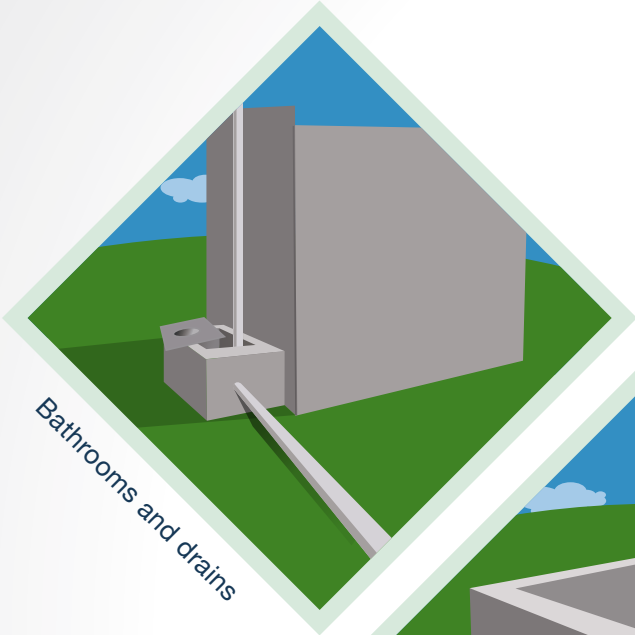


Water tanks

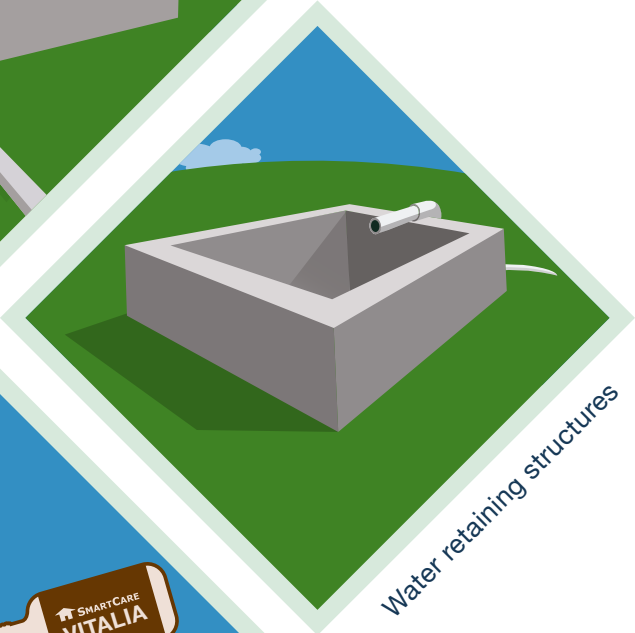


Basements

AFFECTED AREAS OR AREAS TO BE TREATED



Bathrooms and drains



Water retaining structures



Can be added with exterior putty to improve the life of paint

VITALIA



Asian Paints SmartCare Vitalia is an integral waterproofing liquid with advanced formulation and superior plasticising additives for cement-concrete, mortar and plaster.

Product Features & Benefits



Waterproofing:
Imparts waterproofing to concrete and cement-sand plaster.



Standard Compliance:
Exceeds requirement of IS 9103 for water reduction and IS 2645 for water impermeability.



Superior Compressive Strength:
Ensures longer lasting walls.



Enhances the life of paint when added to exterior putty.

NO ROOM FOR TILING PROBLEMS

Tiling Problems

Laying of tiles using the right method is as important as the quality of tiles used. If not done correctly, it leads to problems like cracking, hollow sounds and dampness issues due to water ingress through tile joints.

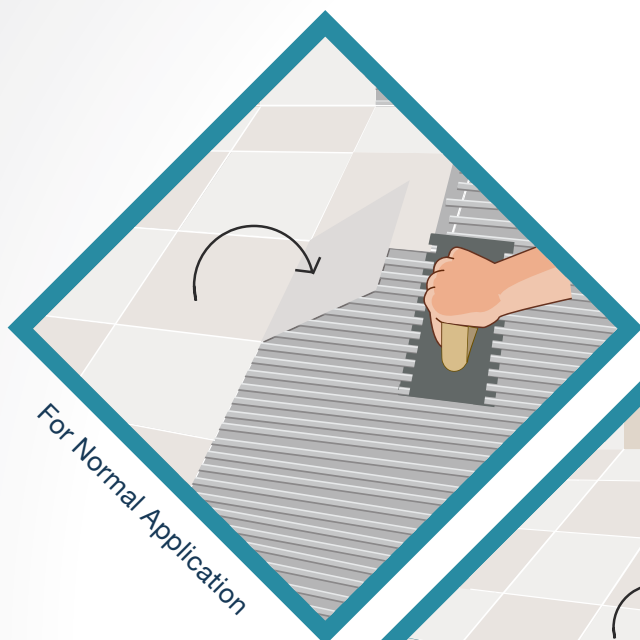
What causes them?

Generally applicators use grey cement to fix tiles and white cement for filling joints. These dry very quickly leading to improper application, poor adhesion and eventually tile cracking. White cement corrodes away with time, offering no waterproofing or aesthetic value.

Why treat them?

Improper tile fixing and grouting not only gives a shabby look but also reduces the life of tiles, weakening the house structure. Thus, using a proper Tile Adhesive and Tile Grout is very important.





For Normal Application



For Tile-on-Tile Application



For Glass Tile Application

SmartCare Tile Adhesives

TILE ADHESIVE FOR NORMAL APPLICATION



SmartCare Tile Adhesive for Normal Application is a single component cement based polymer modified adhesive for fixing tiles on floors as well as walls in interior & exterior areas. Meets IS 15477 Standard.

TILE ADHESIVE FOR TILE-ON-TILE APPLICATION



SmartCare Tile Adhesive for Tile-on-Tile Application is a single component cement based polymer modified adhesive for fixing tiles over existing tiles on floors as well as walls in interior & exterior areas. Meets IS 15477 Standard.

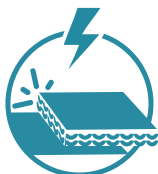
GLASS TILE ADHESIVE



SmartCare Glass Tile Adhesive is a single component polymer modified white cement based adhesive for fixing decorative glass tiles on walls, floors, swimming pools etc in interior & exterior areas. Meets IS 15477 Standard.



**Optimal Setting
Time**

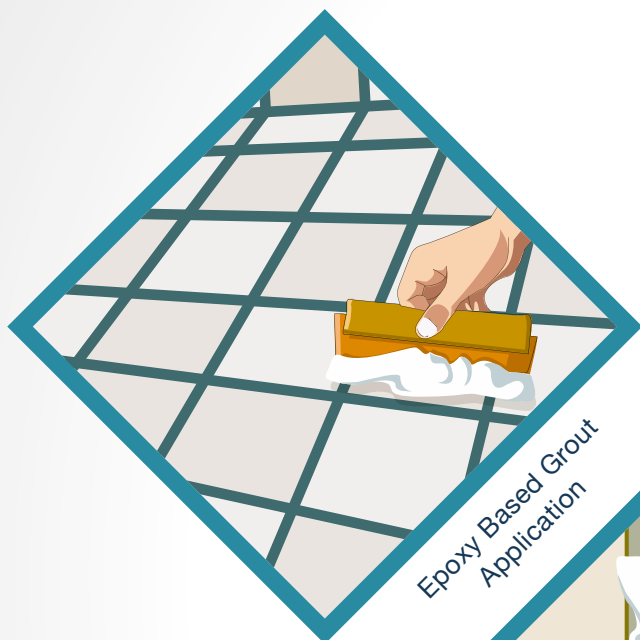


Quick Curing



Superior Durability

Product Features & Benefits



Epoxy Based Grout
Application



Cement Based Grout
Application

SmartCare Tile Grout

TILE GROUT EPOXY BASED



SmartCare Tile Grout - Epoxy Based is a two component epoxy resin based tintable grout, specifically designed for use in the application of ceramic tiles, vitrified tiles and stone joints where a hygienic and sterile condition is expected.

Product Features & Benefits



Water Resistant



Chemical Attack
Resistant



Available in 26
shades



Faster Setting
Time



Gaps up to 10mm

TILE GROUT CEMENT BASED



SmartCare Tile Grout - Cement Based is a single component cement based polymer modified tile grout for filling tile joints up to 5mm width. It is a specially formulated premium, fast setting, low shrinkage grout and prevents ingress of water through the joint.

Product Features & Benefits



Water Resistant



Household Cleaner
Resistant



Superior Adhesion



Faster Setting
Time



Gaps up to 5mm

NO ROOM FOR GAPS

Gaps

In building construction, the place where two surfaces meet is called a joint. These surfaces can be of the same material e.g. joints between two glass panes or different materials e.g. joints between walls and doorframes. When a space is left between these two surfaces, it is called a gap.

What causes them?

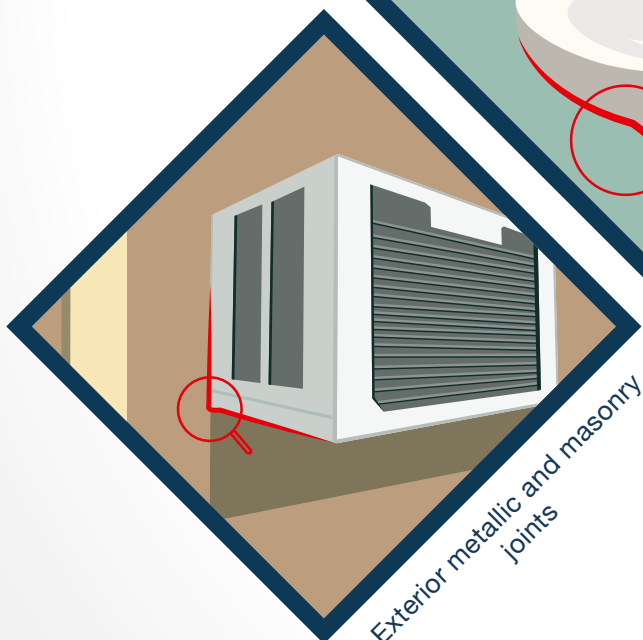
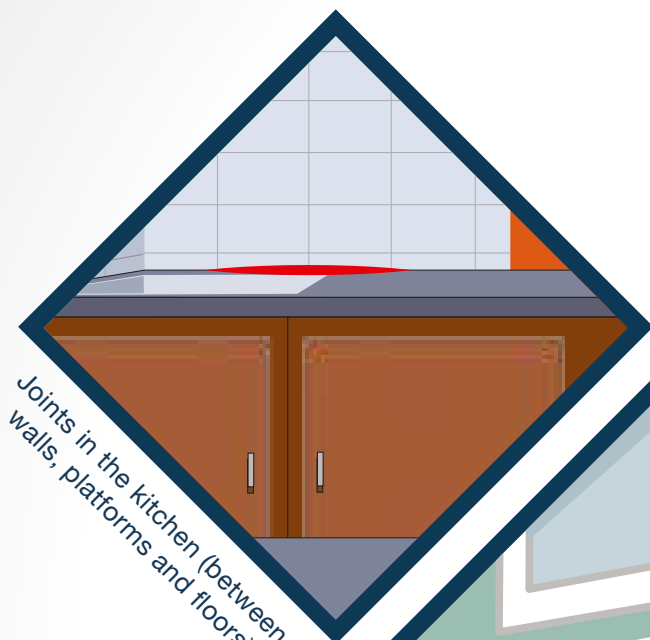
In construction, spaces need to be created to fit window frames, bathroom fittings, doors etc. If the space created is greater than the actual size of the fitting, it results in gaps. At times to ensure healthy construction, gaps are left intentionally. Unlike cracks, gaps are not a deformation, but if not treated with an appropriate sealant, they may eventually cause waterproofing problems.

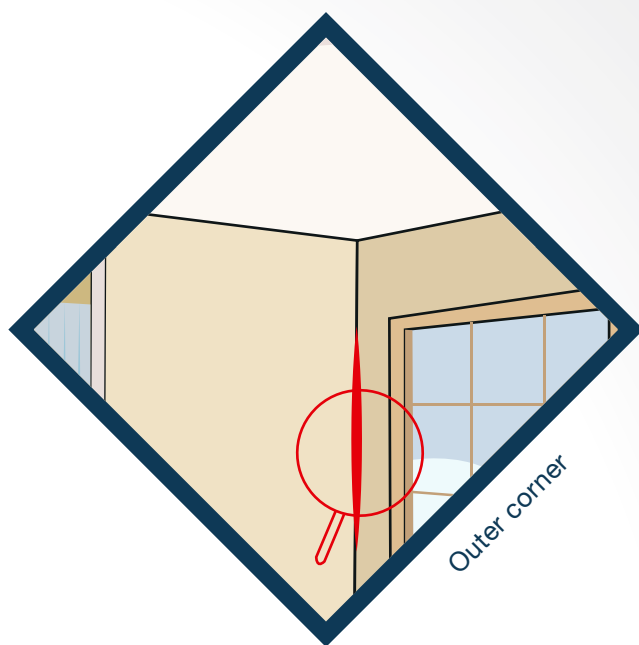
Why treat them?

If the gaps are not filled/sealed, they will allow water to pass through and cause waterproofing issues. If these gaps are filled with cement putty/POP, they'll end up restricting the movement of the joint as well as hamper the décor due to their tendency to crack. A sealant on the other hand will hermetically seal the joint and not allow air or water to pass through. It will also accommodate the differential expansion and contraction.



AFFECTED AREAS OR AREAS TO BE TREATED





UNYVERSEAL



Asian Paints SmartCare UnyverSeal is a durable and odorless neutral silicone sealant for sealing of building, glass and sanitary joints.

Product Features & Benefits



Neutral Cured:
Applicable on all alkaline surfaces and metallic surfaces.



Flexibility:
Can withstand joint movement of 25%.



Anti-Fungal:
ISO 846 certified fungus protection.

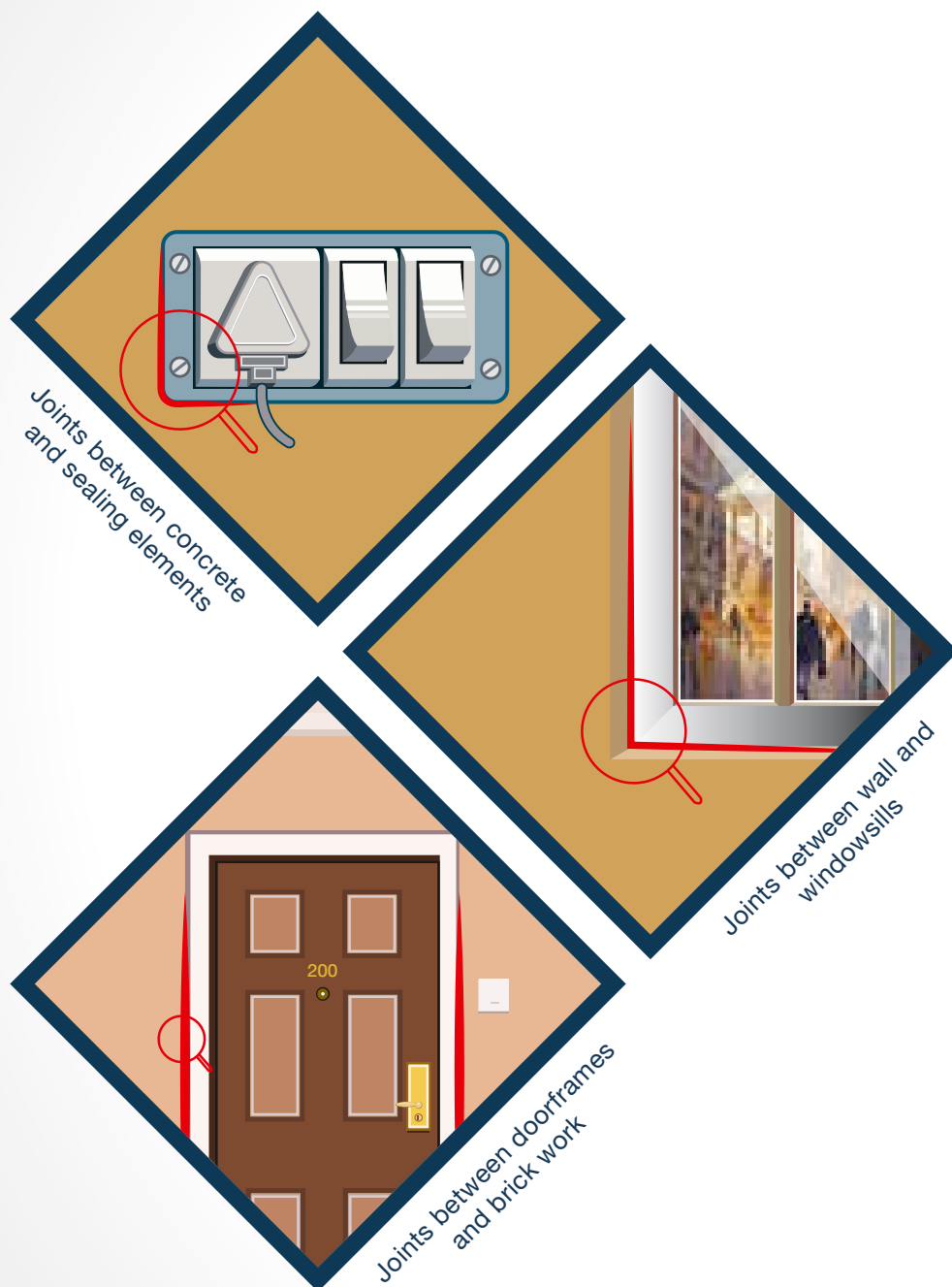


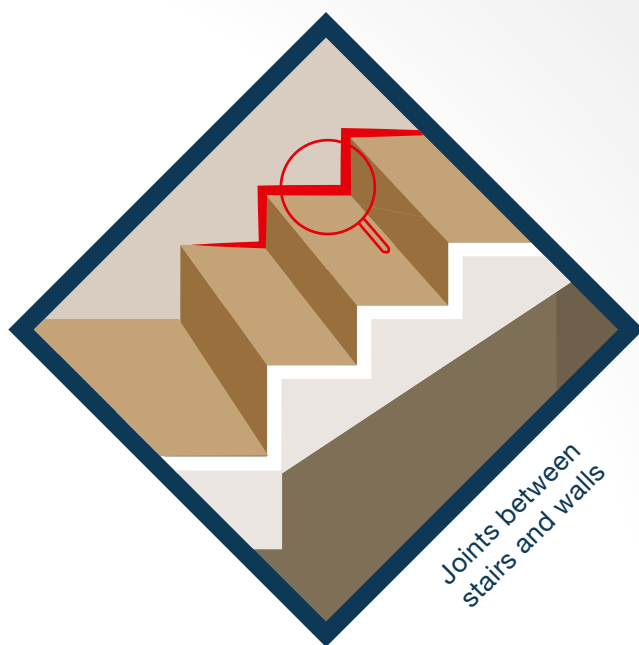
Gap filling:
Can be used for joints up to 25mm.



Waterproofing:
Effective waterproofing and protection.

AFFECTED AREAS OR AREAS TO BE TREATED





AKRYLMAX



Asian Paints SmartCare AkrylMax is an acrylic emulsion based plastic elastic sealant for sealing building joints that can be top coated with a water-based paint.

Product Features & Benefits



Multi-Surface:

Concrete, brickwork, skirting board, PVC, anodized aluminum, painted wood, etc.



Flexibility:

High elongation film that accommodates minor movements.



Durability:

Forms a highly durable seal that works from temperatures of -20 to +75°C.



Gap filling:

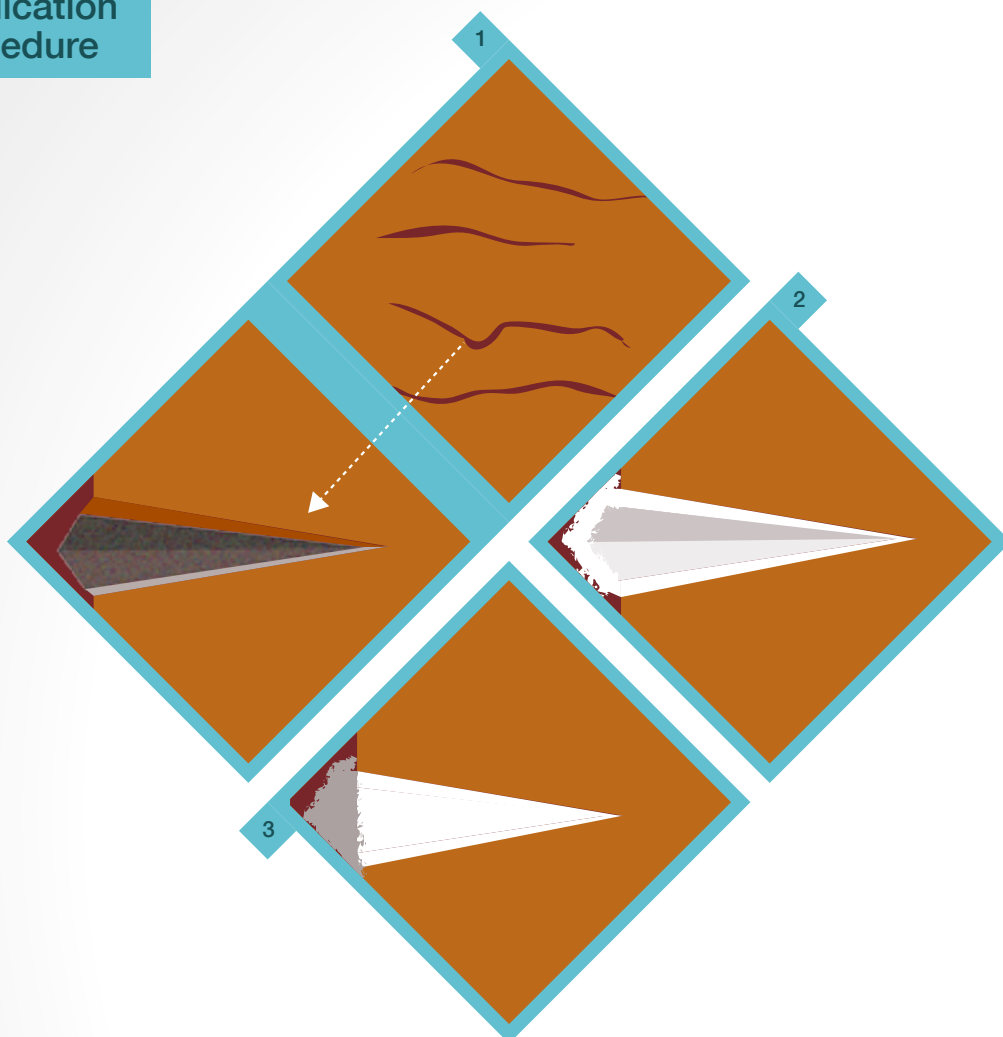
Can be used for joints up to 20mm.



Waterproofing:

Water-resistant film stops water entry through joints.

Application Procedure



1

Cleaning

Open the cracks, widen them to form a 'V' shaped groove. Clean the area thoroughly so that it is free from loose dust particles.

2

Priming

Post cleaning, treat the opened crack using an Asian Paints primer.

3

Apply the first coat of SmartCare Crack Seal on the crack using a spatula or putty knife. Press the paste firmly into the crack and level it with the surface.

4

Allow it to set for 6-8 hours before applying the 2nd coat of **SmartCare Crack Seal**.

5

Further finishing like POP or putty can be taken up once the coat is fully dry.

Crack Seal Advantages



	Reinforced with glass fiber. Strong mechanical and waterproofing properties	No fiber. Does not have similar mechanical properties	No fiber. Just a temporary solution
	Polymer modified. Can accommodate minor movements and temperature variations and hence flexible	Similar properties, however less than Crack Seal	No flexibility. Very rigid and will crack in a few months
	Can bridge up to 3mm cracks	Similar properties, however less than Crack Seal	Not a crack filling product
	High solid content. Low shrinkage	More shrinkage in comparison to Crack Seal	Putty does not possess this feature
	Less drying time of 6-8 hrs	Longer drying time of 24 hrs	Putty does not possess this feature

Application Procedure for hybrid PU Sealant



1 Clean the surface by removing dust & loose particles.

3 Fill Hybrid PU Sealant in joint; spread material at edges to ensure the adhesion of sealant at both edge of joint then leveled the sealant with spatula/putty knife.

2 Cut the sausage at one end & load in sausage applicator gun with nozzle at 45°angle, cut the nozzle as per joint width.

4 Top surface should be tooled with concave shape by using soap water.

PRECAUTIONS AND LIMITATIONS

- 1** Use masking tape on both sides of joints to ensure uniform application.
- 2** Use bond breaker to ensure depth and non-adhesion at 3rd side.
- 3** Recommended for joints having maximum movement of 25%
- 4** Not recommended for glazing and not for aquariums, PE, PP, Teflon and bituminous surfaces.
- 5** Store in cool & dry place.

Hybrid PU Advantages







VS

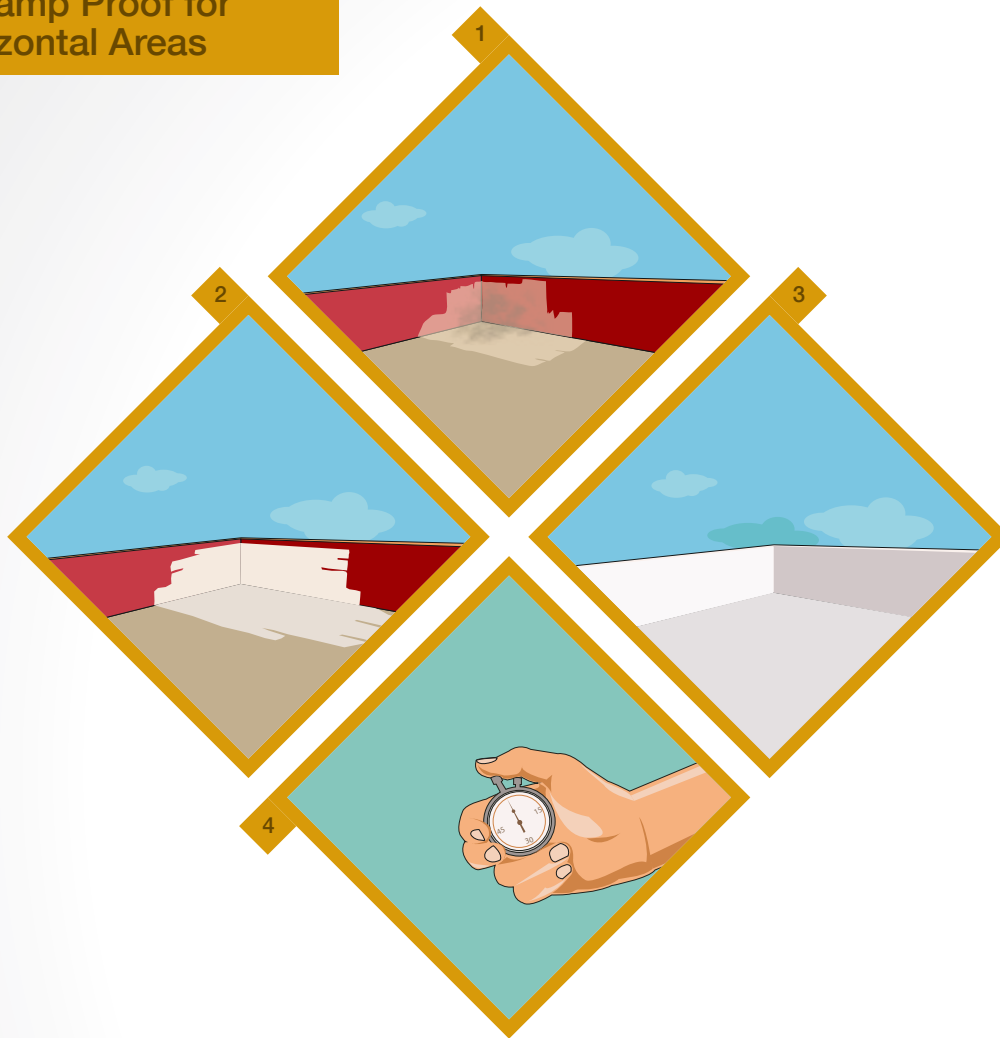


HYBRID PU SEALANT

STANDARD
POLYURETHANE

	No change with time	Hardness increases with time leading to low durability
	Odorless	Pungent odor
	Durability is extremely high	The durability is less as compared to that of Hybrid PU Sealant
	Environment friendly	Contains Isocyanine which tends to react with moisture in concrete to form gases

Application Procedure of Damp Proof for Horizontal Areas



1

Apply a self priming coat of **SmartCare Damp Proof** (diluted with water in 3:1 ratio).

2

Apply two perpendicular coats of **SmartCare Damp Proof** without dilution. Also cover the parapet walls to give an envelop coating.

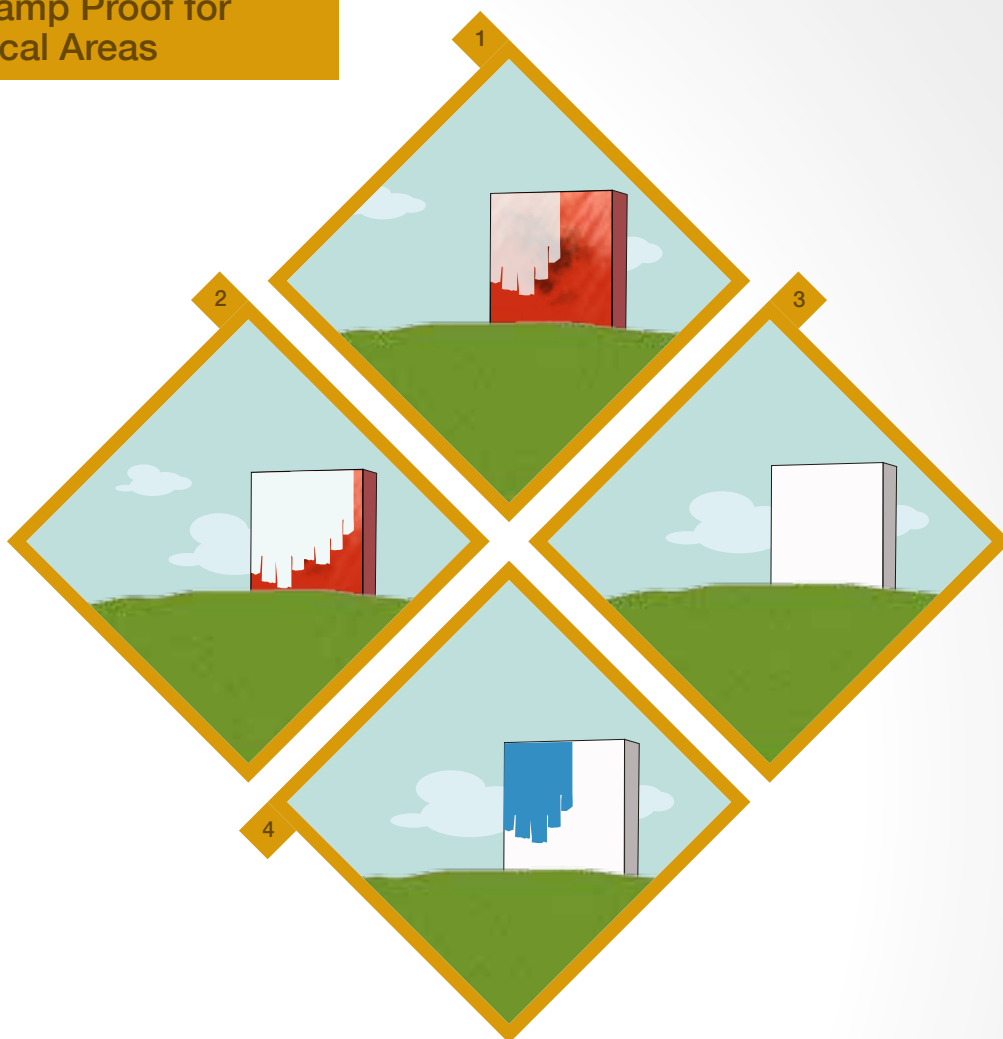
3

Achieve a forced coverage of 10 sq.ft./ltr. for the system*.

4

Allow it to dry for 4-6 hours between two coats.

Application Procedure of Damp Proof for Vertical Areas



1 Apply a self priming coat of **SmartCare Damp Proof** (diluted with water in 3:1 ratio).

2 Apply one coat of **SmartCare Damp Proof** without dilution.

3 Ensure a forced coverage of 25 sq.ft./ltr. for the system#.

4 Apply two coats of any high quality exterior emulsion of the desired shade.

5 Allow it to dry for 4-6 hours between coats.

Material Calculator

*Terrace Area: _____ sq.ft.

Coverage: _____ 10 sq.ft./ltr.

Material required: _____ (Affected Area ÷ 10) ltrs.

#Wall Area: _____ sq.ft.

Coverage: _____ 25 sq.ft./ltr.

Material required: _____ (Affected Area ÷ 25) ltrs.

For best results, apply all products after consulting with experts.

Damp Proof Advantages



SMARTCARE
DAMP PROOF

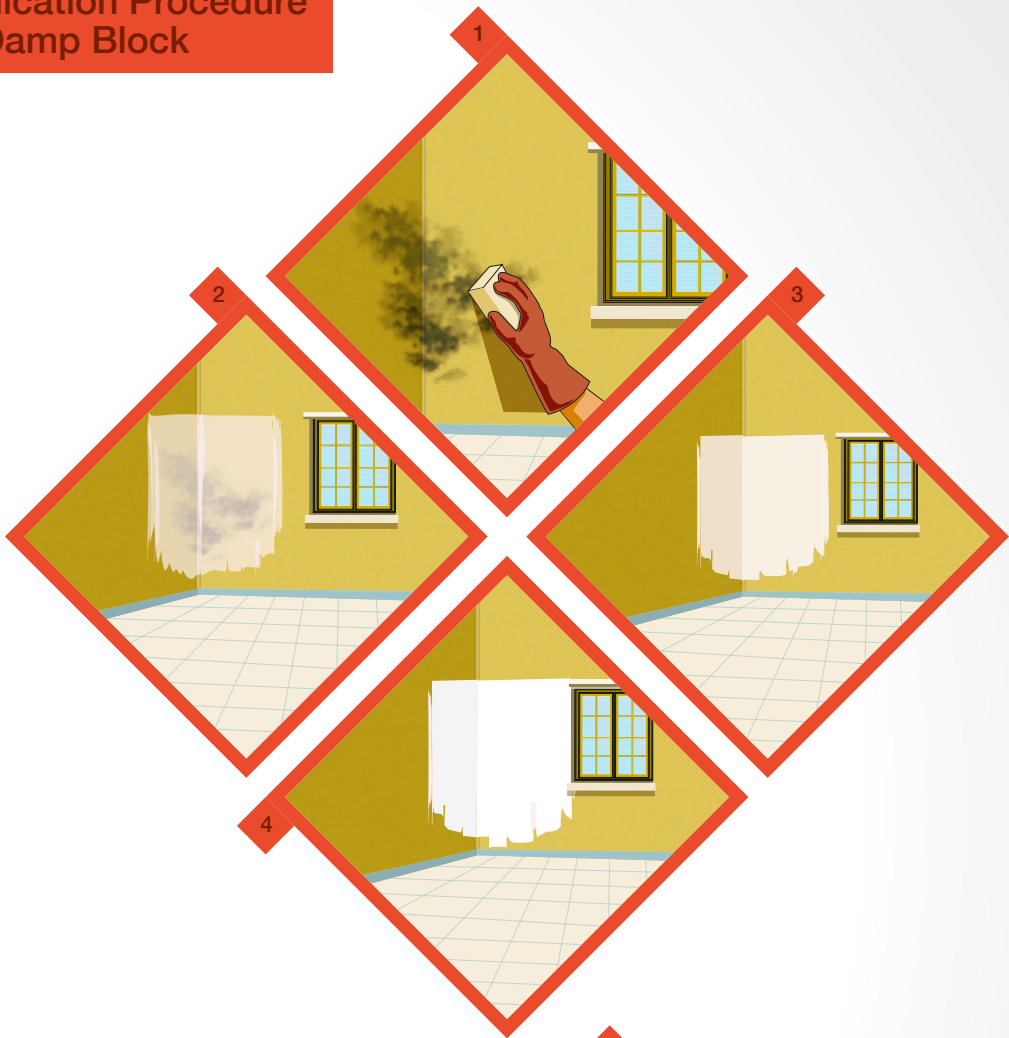
VS



POPULAR
COMPETITOR

	Highly flexible up to 220%. Crack bridging ability of up to 2mm	Low elongation of only 93%
	Reinforced with recron fiber for abrasion resistance	Poor abrasion resistance
	Dry Film Thickness of up to 500-600 microns on horizontal application	Dry Film Thickness of up to 300-400 microns
	Strong adhesion to concrete	Medium adhesion to concrete
	Advanced anti-carbonation property	This property is not found in most competitor products
	For terraces and side walls	Separate products for separate areas

Application Procedure for Damp Block



1

Cleaning

Remove old paint, putty or existing POP using a chisel and a wire-brush. Ensure you reach the cement plaster for the product application.

2

Priming

Apply a self-priming coat of **SmartCare Damp Block** (diluted with water in 1:1 ratio).

3

Apply 2 coats of **SmartCare Damp Block** (diluted with water in 3:1 ratio) using a putty knife or a trowel. Achieve a forced coverage of 7.5 sq.ft./kg for the system*).

4

The system should cover an area well over and wide of the affected area. This will prevent water from affecting the adjacent areas.

5

A gap of 4 hours should be given between coats.

6

Apply putty-primer and suitable topcoat. For severely affected areas, apply an additional coat as mentioned above.

Material Calculator

*Affected Area: _____ sq.ft. (Calculate by adding 2 feet beyond the affected area on all sides)
Coverage: _____ 7.5 sq.ft./ltr.
Material required: _____ (Affected Area÷7.5) ltrs.

For best results, apply all products after consulting with experts.

Damp Block Advantages



SMARTCARE
DAMP BLOCK

VS



POPULAR
COMPETITOR

&



PUTTY +
CHEMICAL

	Highly breathable product. Allows water vapor to pass while blocking water	Completely non-breathable. Hence pressure builds up over time	Moderately breathable
	Resists negative hydrostatic pressure of up to 4 bars	Resists negative hydrostatic pressure less than 4 bars	Cannot withstand negative hydrostatic pressure. Dampness starts reappearing within a few weeks
	Highly flexible. Hence can accommodate minor movements and cracks that develop later	Hard and brittle	Very rigid. Hence will crack easily
	Easy-to-apply, single pack product	2 pack product. Not painter friendly	Products to be sourced independently
	Formulated using nanotechnology and crystalline technology	No such technology	Cheap. Not a waterproofing solution
	1mm thickness	60 microns	Putty product does not possess this feature

Application Procedure for Vitalia



- 1 Charge cement and aggregates to concrete mixer as per the mix design.
- 2 Mix in dry state for 1-2 minutes. Add 50% to 60% of mixing / gauging water. Mix for 2-3 minutes.
- 3 Stir the Vitalia container well before use.
- 4 Vitalia needs to be added as per the recommended dosage into the remaining mixing / gauging water, then added to the concrete mixer and mixed for another 2-3 minutes.
- 5 Place the concrete or apply plaster as needed.
- 6 Cure the applied mortar or concrete as per good construction practices.
- 7 Further finishing like POP or putty can be taken up once the coat is fully dry.

NOTE

• Do not add Vitalia directly to dry mix • Recommended dosage: 100 ml of Vitalia for 50 kg cement

For best results, apply all products after consulting with experts.



Vitalia Advantages






SMARTCARE
VITALIA

VS



POPULAR
COMPETITOR

	Lower dosage (100 ml per 50 kg)	Higher dosage (200 ml per 50 kg)
	Ensures stipulated compressive strength even at double or higher dosage	Compressive strength reduces with increased dosage
	Excellent workability even with crushed rock sand	Poor workability when used with crushed rock sand




SMARTCARE VITALIA

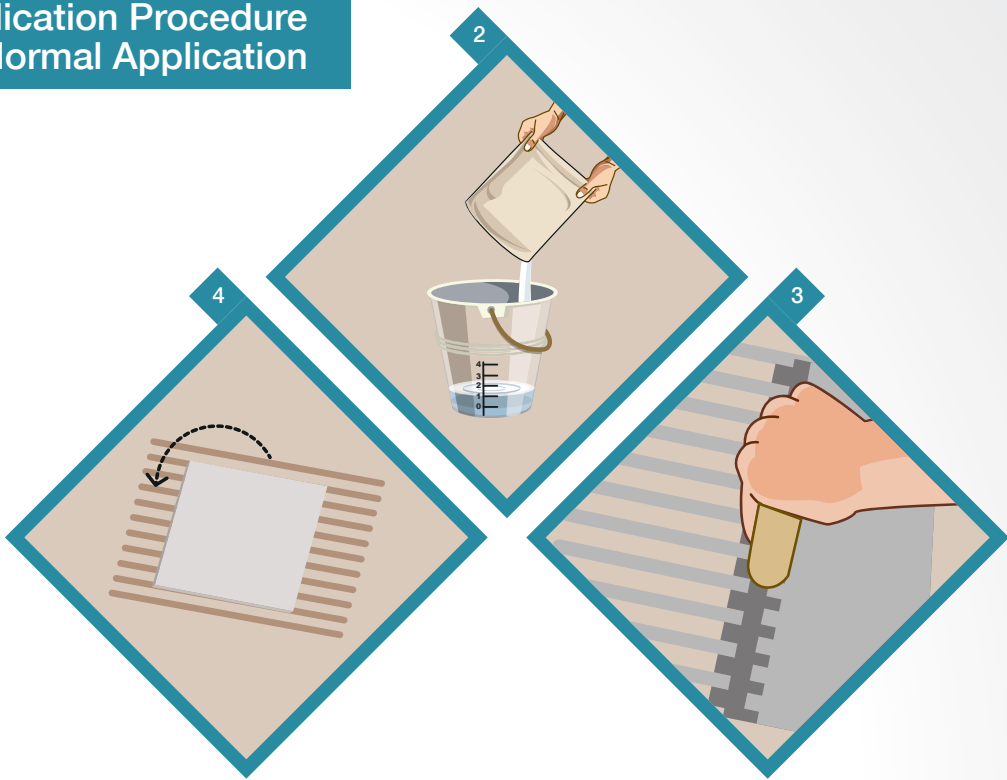
VS



POWDER WATERPROOFING
COMPOUND

	Easily dispersible & miscible	Uneven dispersion
---	----------------------------------	-------------------

Application Procedure for Normal Application



1

Surface to be tiled must be clean, free from contamination and in SSD (Saturated Surface Dry) condition.

2

Mix Tile Adhesive for Normal Application into clean water in 3:1 ratio by volume (3 parts powder, 1 part water) and stir to get a lump free mortar.

3

Spread the Tile Adhesive for Normal Application on the surface using a trowel (maximum 1 sq. m. area at a time) and comb using a notched trowel of appropriate depth.

4

Press the tile firmly into position with a slight twisting action to maximize contact area.

5

Leave adequate joints between the tiles by using spacers.

6

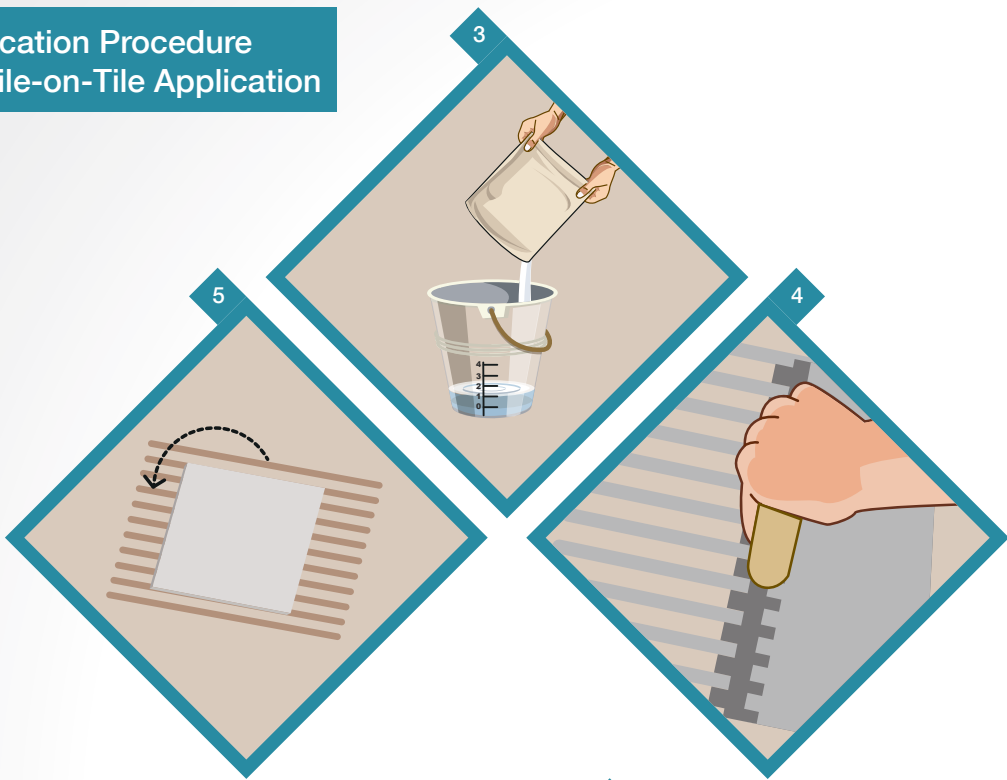
Remove excess adhesive from the tiles and between joints.

PRECAUTIONS AND LIMITATIONS

- 1 Always mix Tile Adhesive for Normal Application to water and not water to the adhesive.
- 2 Tiles can be fixed within 10-15 minutes of Tile Adhesive for Normal Application.
- 3 Tiles can be adjusted up to 15 minutes after fixing.
- 4 After fixing, keep the surface dry for 24 hours.
- 5 For installing heavy tiles and natural stones (marble and granite) on floors and other horizontal surfaces only.

For best results, use SmartCare Tile Grout (Cement or Epoxy) to fill the joints. Tile joints can be filled after minimum 24 hours of application of tiles.

Application Procedure For Tile-on-Tile Application



1 The existing flooring should be in sound condition, properly leveled and free from hollow sounds.

2 Surface to be tiled must be clean, free from contamination and in SSD (Saturated Surface Dry) condition.

3 Mix the Tile Adhesive for Tile-on-Tile Application into clean water in 3:1 ratio by volume (3 parts powder, 1 part water) and stir to get a lump free mortar.

4 Spread the Tile Adhesive for Tile-on-Tile Application on the surface using a trowel (maximum 1 sq. m. area at a time) and comb using a notched trowel of appropriate depth.

5 Press the tile firmly into position with a slight twisting action to maximise contact area.

6 Leave adequate joints between the tiles by using spacers.

7 Remove excess adhesive from the tiles and between joints.

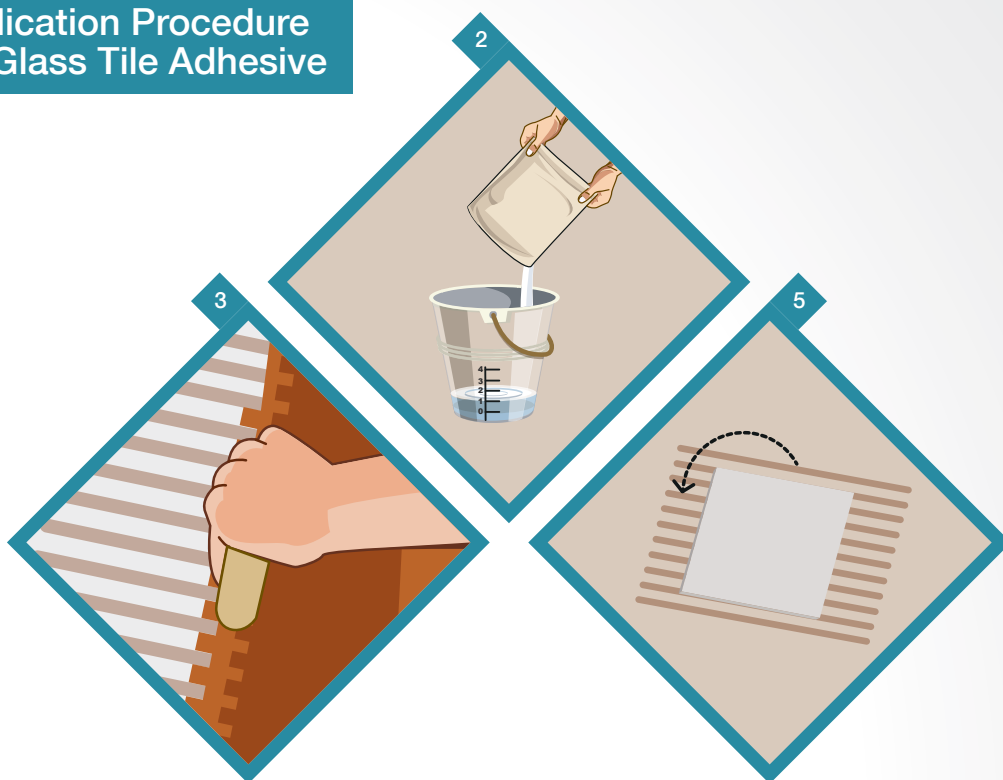
PRECAUTIONS AND LIMITATIONS: In case of a damaged existing surface, improper adhesion or hollow sounds, remove the existing tiles and re-affix it or re-plaster to level the surface before Tile Adhesive for Tile-on-Tile Application.

PRECAUTIONS AND LIMITATIONS

- 1** Always mix Tile Adhesive for Tile-on-Tile Application to water and not water to the adhesive.
- 2** Tiles can be fixed within 10-15 minutes of Tile Adhesive for Tile-on-Tile Application.
- 3** Tiles can be adjusted up to 15 minutes after fixing.
- 4** After fixing, keep the surface dry for 24 hours.
- 5** Meant for installing heavy tiles and natural stones (marble and granite) on tiled horizontal surfaces only.

For best results, use SmartCare Tile Grout (Cement or Epoxy) to fill the joints. Tile joints can be filled after a minimum 24 hours of application of tiles.

Application Procedure For Glass Tile Adhesive



1

Surface to be tiled must be clean, free from contamination and in SSD (Saturated Surface Dry) condition. Suitable surfaces include concrete, cement-sand screed or plaster.

2

Mix Glass Tile Adhesive into clean water in 3:1 ratio by volume (3 parts powder, 1 part water) and stir to get a lump-free mortar.

3

Spread the Glass Tile Adhesive on the surface using a trowel (maximum 1 sq. m. area at a time) and comb using a notched trowel of appropriate depth.

4

Press the glass mosaic tile firmly so that it is set in place. Provide some twisting action for maximum contact.

5

Ensure that tile adhesive seeps out from the joints in the glass mosaic uniformly across the tile.

6

The face of the sheet bonded to the glass mosaic should then be dampened with water and removed carefully.

7

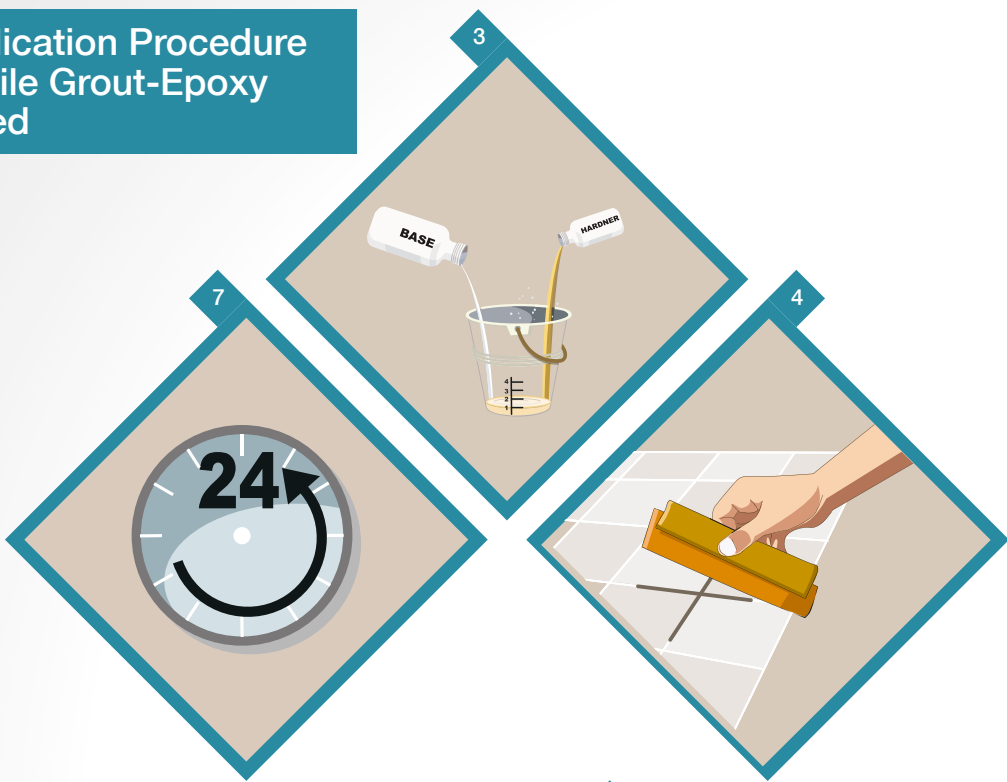
Clean excess adhesive from between the joints and from the tiles.

PRECAUTIONS AND LIMITATIONS

- 1 Do not apply directly on wet surfaces.
- 2 Always mix Glass Tile Adhesive to water and not water to the adhesive.
- 3 Tiles can be fixed within 20 minutes of Glass Tile Adhesive application.
- 4 Tiles can be adjusted up to 25 minutes after fixing.
- 5 After fixing, keep the surface dry for 24 hours.
- 6 Meant for installing heavy tiles and natural stones (marble and granite) on floors and other horizontal surfaces only.

For best results, use SmartCare Tile Grout-Epoxy Based to fill the joints. Tile joints can be filled after a minimum 24 hours of application of tiles.

Application Procedure for Tile Grout-Epoxy Based



- 1 Make sure tiles are firmly set and tile joints are clean and free of foreign matter, standing water and dirt.
- 2 To get the desired colour of grout, dispense the required quantity of colour in the Base from DTS (Dealer Tinting System) machine. Mix the colour with base properly.
 - Mix complete units of Base and Hardener with each other.
 - Mix thoroughly until a homogenous, consistent coloured paste is obtained.
- 3 By using a hard rubber squeeze, press the grout firmly into joints ensuring that the joints are completely filled.
 - Remove the excess grout material from joints and surface by moving the squeeze diagonally to the grout lines.

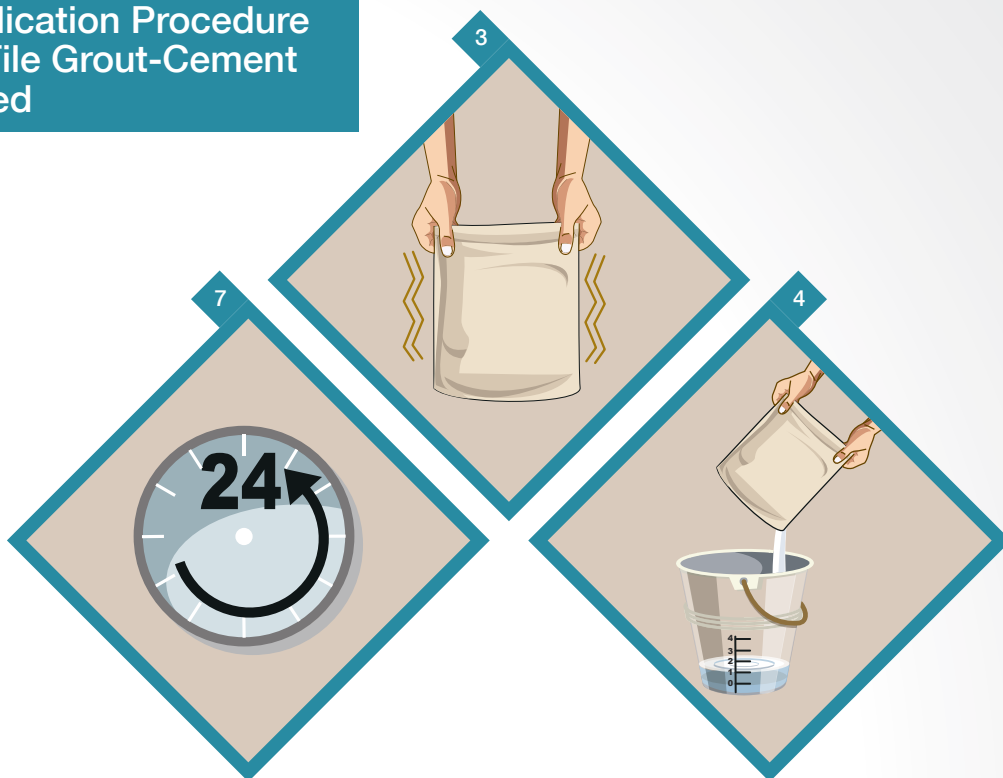
- 4 Clean off the surplus grout from tile joints and surface within 20-25 minutes. Use a rough textured sponge dampened with clean water to clean the excess grout and to remove the grout residue.
- 5 After completion of work, clean the grout haze from the tile with clean water or soap solution.

PRECAUTIONS AND LIMITATIONS

- 1 Wear suitable rubber gloves to avoid skin contact during application.
- 2 Never apply the Tile Grout-Epoxy Based on wet/damp surface.
- 3 Always mix complete units. The Base and Hardener are packaged to the exact quantity ratio for proper mixing. Partial mixing will result in improper curing of the grout.
- 4 Do not allow water to flow/run in to un-grouted joints during application.
- 5 Apply masking tapes along tile joints while working on unglazed floor tiles, natural stone tiles with matt glaze or textured surfaces.

For best results, use SmartCare Tile Grout (Cement or Epoxy) to fill the joints. Tile joints can be filled after a minimum 24 hours of application of tiles.

Application Procedure for Tile Grout-Cement Based



1

Before grouting make sure that the tiles are firmly set and the tile adhesive is cured.

2

Tile joints must be clean, free of oil and other foreign matter. About 2/3rd of the depth of the tile should be available for grouting.

3

Shake the bag thoroughly to avoid any colour variation. If more than two bags are to be used, dry blend first.

4

Press the glass mosaic tile firmly so that it is set in place. Provide some twisting action for maximum contact.

5

Ensure that tile adhesive seeps out from the joints in the glass mosaic uniformly across the tile.

6

The face of the sheet bonded to the glass mosaic should then be dampened with water and removed carefully.

7

Clean excess adhesive from between the joints and from the tiles.

PRECAUTIONS AND LIMITATIONS

- 1 Do not use when high chemical or stain resistance is required or in an industrial environment. In such cases, use Asian Paints SmartCare Tile Grout-Epoxy Based.
- 2 When 2 or more bags are required, it is advisable to dry blend the powders first to avoid colour variation.

For best results, use SmartCare Tile Grout-Epoxy Based to fill the joints. Tile joints can be filled after a minimum 24 hours of application of tiles.



Tile Adhesive for Normal Application



Tile Adhesive for Tile-on-Tile Application



Glass Tile Adhesive



Conventional Solutions



About the Product

Provides superior and sustainable adhesion that prevents any tile cracking or hollow sounds

Allows you to fix new tiles over existing tiles thus eliminating the time, cost and debris associated with removal of old tiles

Provides excellent adhesion for fixing expensive and extremely delicate glass mosaic tiles

Manually mixed ordinary cement and sand mixtures



Quality

Factory controlled manufacturing using pre-mixed grey cement, sand & special additives. Meets the requirements of IS15477

No quality control and no standardised manufacturing. The mixing ratio and quality of material being used depends entirely on the skill of the applicator



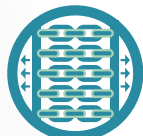
Tile-on-Tile

No

Yes

No

No



Excellent Adhesion

High bond & shear strength resulting in excellent adhesion

Low bond and shear strength



Durability

100% contact between the tile and surface can be achieved, preventing any cracking or hollow sounds

Lack of proper contact between the tile and surface leads to poor adhesion, hollow sounds and hence cracking in tiles



Water Absorption

Low water absorption

High water absorption

TILE ADHESIVES



Tile Adhesive for Normal Application



Tile Adhesive for Tile-on-Tile Application



Glass Tile Adhesive



Conventional Solutions



Labor Intensive

Large quantities of the mixture can be created in one go because the material is usable for 2-3 hours. Pre-soaking and wet curing of tiles is not required

Requires repeatedly creation of small mixtures because they dry up very quickly. Pre-soaking and wet curing of tiles is required



Adjustability Time

Correcting any mistakes is easy because tiles can be adjusted up to 15 minutes after fixing

No adjustability time



Shock Resistance

Good shock resistance for absorbing vibrations due to foot traffic etc

No shock resistance



Decor

Tiles can be fixed from any corner, preventing inappropriate tile cutting

Tiles can be fixed from the bottom only



Areas of Usage

Permanent installation of ceramic, vitrified and porcelain tiles on horizontal or vertical masonry surfaces in interiors as well as exteriors. This product can also be used for installation of heavy tiles and natural stones like marble and granite, on floors or other horizontal surfaces.

Permanent installation of ceramic, vitrified and porcelain tiles on top of existing tiles. This product can also be used for installation of heavy tiles and natural stones like marble and granite, on tiled horizontal surfaces.

Fixing decorative glass tiles in interiors as well as exteriors. This product can also be used for installation of heavy tiles and natural stones like marble and granite, on floors or other horizontal surfaces.

TILE GROUTS



Tile Grout – Cement based



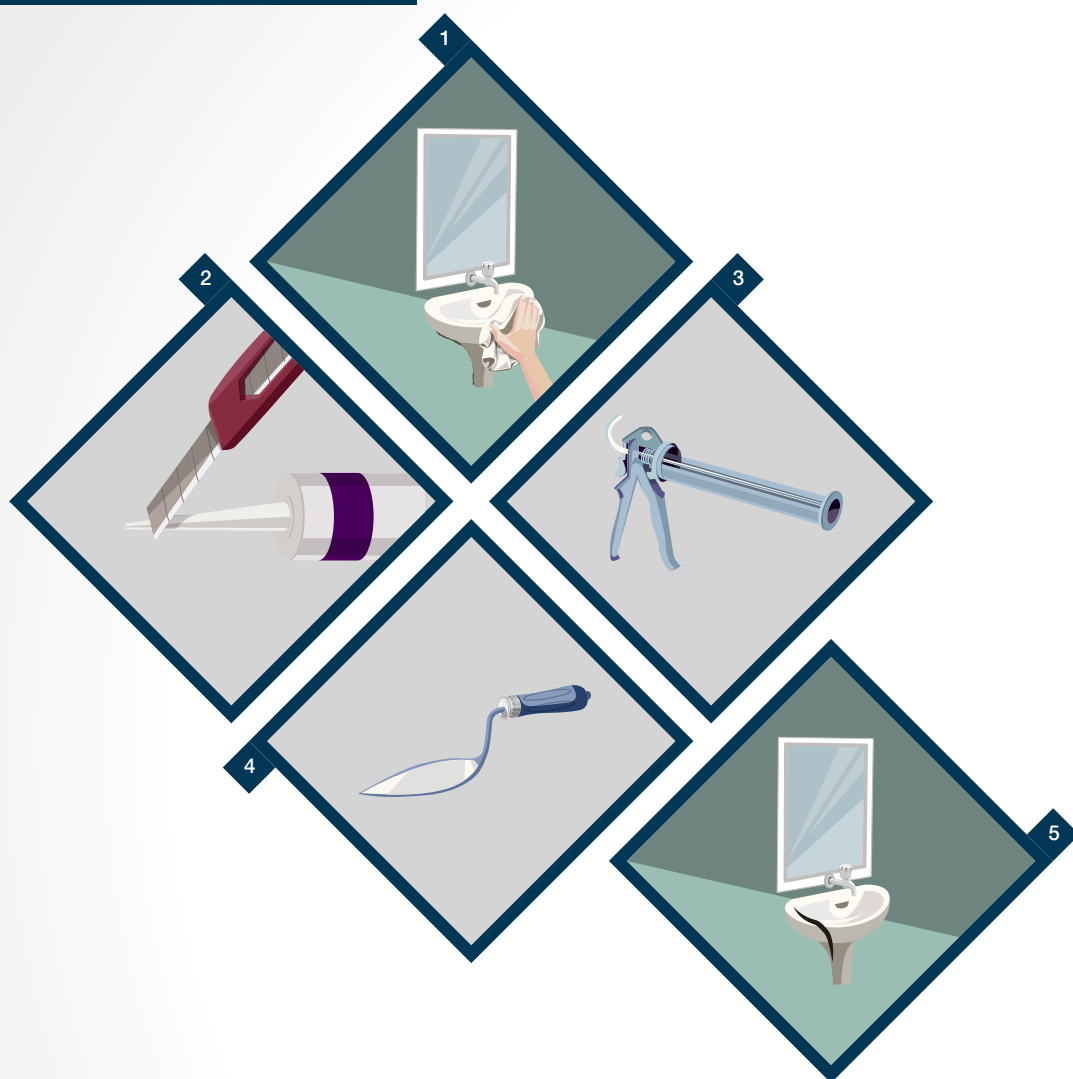
Tile Grout – Epoxy based



Conventional Solutions

 About the Product	Offers 7 brilliant shades that not only enhance the beauty of tiles but also provide water, stain and household cleaner resistance	Water impervious, non-toxic grout that is durable until the life of the tile and is especially meant for areas of hygienic importance or areas that suffer from constant chemical attacks	Ordinary white cement or white cement mixed manually with colourants
 Quality	Factory manufactured single component cement-based grout having special polymers and additives and meets the requirements of ANSI 118	Factory manufactured 2 component epoxy resin-based product	No quality control and no standardised manufacturing. The mixing ratio and quality of material being used depends entirely on the skill of the applicator
 Durability	Durable grout that can be used for joints up to 5mm in width	Durable grout that can be used for joints up to 10mm in width	Non-durable filler that corrodes away with time. Just a temporary solution
 Waterproofing	Water-resistant cement based grout that helps in protecting décor	Water impervious epoxy based grout that helps in protecting décor	No waterproofing. In fact lack of water resistance can lead to paint spoilage on adjacent walls
 Shock Resistance	High flexural strength for absorbing vibrations from foot traffic etc.	High flexural strength for absorbing vibrations from foot traffic etc.	Low flexibility results in white cement cracking due to vibrations
 Chemical Resistance	Withstands attacks from chemicals like household cleaners	Withstands attacks from chemicals like acid solutions, toilet cleaners, household cleaners etc making it perfect for areas exposed to constant chemical attacks like swimming pools, industrial floors etc.	No chemical resistance
 Stain Resistance	Resists stains and can be cleaned easily	Stain resistant is best suited for areas where hygienic or sterile conditions are paramount like hospitals, kitchens, food processing units etc.	No resistance to stains and gets dirty easily
 Decor	Available in 7 brilliant factory shades	Available in 26 brilliant shades	Lack of shades. Has to be manually mixed with dry colorants leading to problems like shade variations
 Areas of Usage	For tile joints up to 5mm in width between all types of tiles and natural stones	For tile joints up to 10mm in width. Ideal for areas that require a hygienic or sterile environment like food processing units, hospitals, kitchens, swimming pools etc.	---

Application Procedure for Unyverseal



1 Clean the surface thoroughly (Remove oil/grease by degreasing solvent).

2 Cut nozzle and cartridge according to joint dimensions.

3 Apply using a sealant gun.

4 Use a palette knife for tooling the surface and removing the air bubbles.

5 Use masking tape on both the sides of the joint to get neat and uniform application.

Unyverseal Advantages



VS



SMARTCARE UNYVERSEAL

POPULAR COMPETITOR

	Neutral Oxim and hence odorless	Acid cured, hence has pungent smell (like vinegar)
	Non-Corrosive. Can be used on aluminium, lead, copper, brass, steel	Acid corrodes, metal substrates
	Excellent adhesion on alkaline surfaces like cement & concrete plaster	Adhesion failure on alkaline surfaces



VS



SMARTCARE UNYVERSEAL

STANDARD PUTTY

	Accommodates joint movement up to 25%	Does not accomodate joint movement
	ISO 846 certified protection from fungi	No fungi resistance

Colours Available **White, Grey, Black, Clear.**
 Silicone Sealants cannot be painted over.

For best results, apply all products after consulting with experts.



Application Procedure for AkrylMax

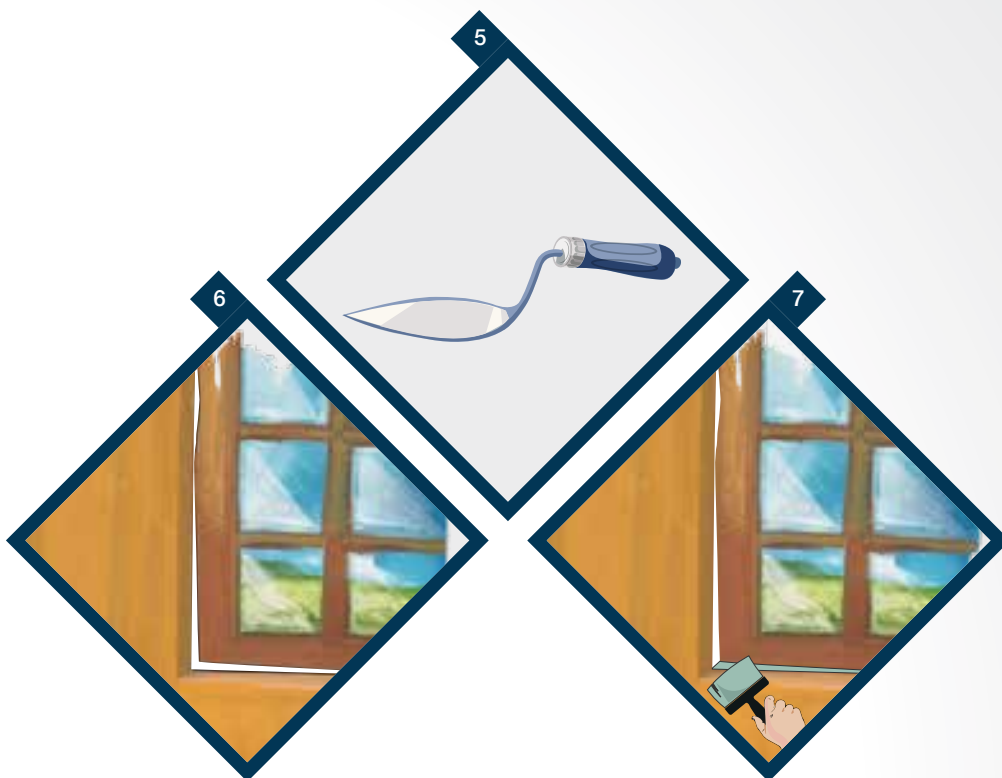


1 Clean the surface thoroughly (Remove oil/grease by degreasing solvent).

2 Cut nozzle and tip of cartridge according to joint dimensions.

3 Use primer* before application.

4 Apply using a sealant gun.



5

Use a palette knife for tooling the surface and removing the air bubbles.

7

Apply a second coat after 6 hours of drying.

6

Use primer* before top coating with a water-based paint.



Primer - For interior, use diluted **AkrylMax** or **Asian Paints Decoprime** water based primer and for exteriors use diluted **Akrylmax** or **Asian Paints Exterior Primer**.

AkrylMax Advantages


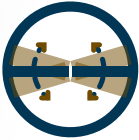





VS



AKRYLMAX
ADVANTAGES

STANDARD
PUTTY

	Excellent adhesion on multiple surfaces	Adhesion on limited surfaces
	Accommodates joint movement up to +/- 7.5 %	Does not accommodate joint movement
	Water resistant	Not Water resistant
	High durability	Low durability
	Fills gap up to 20 mm	Material will crack at 20 mm

Waterproofing Simplified

General FAQs:

1) What is the difference between sealants and adhesives?

An adhesive is a material in liquid or paste form that bonds two substrates together. The primary property desired from an adhesive is superior bonding strength. A sealant is a material in paste form that is flexible or elastic in nature and the primary property desired from a sealant is to seal the joints between two dissimilar substrates “hermetically”. Hermetic means water and air is not allowed to pass through the joint. Sealants have a high MAF (movement accommodation factor).

2) What is Movement Accommodation Factor (MAF)?

Movement accommodation factor is the capability of the sealant to accommodate expansion and contraction movements in the joint. E.g. MAF - +/- 25% means that when a joint of 1 inch width expands +25%, its width becomes 1.25 inches & when it contracts -25%, its width becomes 0.75 inches.

3) What are the different grades of cement?

Types:

OPC - Ordinary Portland Cement-Grey & White

PPC - Portland Pozzolona Cement-Grey (cement with fly ash)

HAC - High Alumina Cement (rapid setting cement)

SRC - Sulphate Resistant Cement (construction in marine or coastal areas that have contact with salt water).

Grades: 33-Compressive strength of 33 N/Sq.mm or 330 Kg/Sq.cm after curing for 28 days in water. Similarly for 43 & 53 grades.

4) Can any water be used in concreting?

No, water must be fit for drinking. Water must be free of salts, suspended solids, oils and fats. IS 456-1978 provides the requirement of the water to be used.

5) What is water permeability?

Water permeability is the rate of flow of fluid through a given substrate per unit area per unit time.

6) What is the difference between a Neutral and Acetoxy cured Silicone Sealant?

Acetoxy silicone sealant reacts with moisture in the air releasing acetic acid, which has pungent odor and may corrode metal. It also affects the adhesion to highly alkaline surfaces. Neutral silicone sealant releases alcohol, which reacts with moisture in the air and does not have bad odor and gives excellent adhesion with alkaline and metallic surfaces.

7) Can Silicone Sealants be painted over?

Silicone sealants cannot be painted over. Acrylic sealants can be used for joints that need to be painted.

8) Can AkrylMax be used for applications permanently under water?

No. While AkrylMax has waterproofing capability it is not suitable for permanent underwater exposure.

9) When should I use AkrylMax and when should I use UnyverSeal?

Whenever there is a need to paint over the joints, AkrylMax should be used.

Whenever there is a requirement for high MAF between any dissimilar joints, UnyverSeal should be used.

10) Can UnyverSeal be used in Aquariums / Fish Tanks?

No. UnyverSeal is Anti-Fungal and is ISO 846 certified for the same and hence should not be used in aquariums and tanks.

11) What happens if the recommended dosage of Vitalia is exceeded?

All the properties of Vitalia remain the same even at double the dosage. In fact the workability increases.

12) What are the typical causes of movement?

Typical causes of movement are linear expansion, properties of construction materials, wind pressures, settlement in foundation, weathering, vibrations, loads, faulty construction practices, etc.

13) What is hydrostatic pressure (HPR)?

Hydrostatic pressure is the pressure applied by a column of water on the building structure. In waterproofing language, this pressure is classified as positive side and negative side hydrostatic pressure. Pressure applied by water on the structure while trying to penetrate it, is positive side hydrostatic pressure. Pressure applied by water on the structure while trying to come out of the structure is negative side hydrostatic pressure.

14) What is the difference between positive side waterproofing and negative side waterproofing?

Positive side waterproofing: Applying waterproofing material to the side of a structural element subjected to positive side hydrostatic pressure. More often than not, it entails stopping the source of water and not allowing water to enter the structure.

Negative side waterproofing: Applying waterproofing to the side of a structural element opposite the one subjected to negative side hydrostatic pressure. Mostly, this is done on interior walls and is meant to block the water from coming out and causing dampness-related problems on the walls.

15) What is carbonation and anti-carbonation coating?

Carbonation is the formation of calcium carbonate (CaCO_3) by a chemical reaction in the concrete. When these reactions take place the pH-value will start falling. The normal pH-value of concrete is above 13 and the pH-value of fully carbonated concrete is below 9. Once the carbonation process reaches the reinforcement rods, and the pH-value drops beneath 13, corrosion will initiate. The formation of lime in the substrate also causes the structure to weaken over a period of time.

Anti-carbonation paint forms an impermeable coating and does not allow the ingress of carbon dioxide and chloride ions into the substrate. Thus, they protect the structure from the effects of carbonation and ensure its longer life.

16) What is forced coverage?

Forced coverage is enforcing the usage of exact quantity of material for a specifically designated area. Normally forced coverage is achieved by marking the area to be painted, calculating the area, ascertaining the material that'll be needed and finally ensuring that the entire quantity is used up only for that area. In the area of waterproofing, the application procedure is as important as the product itself for optimum performance. Achieving the recommended forced coverage is therefore, imperative.

17) What is shrinkage in cracks?

When a crack is treated using a crack-filling compound, normally an indentation is observed in the treated area due to evaporation of water. Hence, cracks normally require multiple coats for bringing them level with the surface. Lesser the solid content in the crack-filler, greater will be the shrinkage.

18) What is breathability?

Breathability is the ability of the coating to allow the passage of water vapor. A breathable coating resists liquid water from passing through but allows water vapor to pass. A non-breathable film results in pressure getting accumulated on the surface due to water vapor and may eventually lead to the paint giving way and leading to blistering or bubbling.

19) What is the meaning of the unit 'bar'?

Bar is the unit of pressure. One bar implies the pressure that will be applied on a 1 sq.cm area by a water column of 10 meter height.

20) What is the difference between damp proofing and waterproofing?

Waterproofing is defined as the treatment of a structure or surface to prevent the passage of water under hydrostatic pressure. Damp proofing is defined as the treatment of a structure or surface to resist the passage of water in absence of hydrostatic pressure. Damp proofing is a temporary solution whereas waterproofing is a long-term solution.

21) What is efflorescence?

Efflorescence occurs on masonry construction when water moving through a wall or other structure, due to vapor transmission or hydraulic pressure brings salts to the surface. As the water evaporates, it leaves the salt behind, which forms a white, fluffy deposit that can normally be brushed off. The resulting white deposits are referred to as 'efflorescence'. Efflorescence is also referred to as 'salt petering' or 'lime blooming'. It is not a structural, but rather, an aesthetic concern and is normally harmless.

22) How can Efflorescence be treated?

Wash the affected surface with 10% diluted hydrochloric acid (HCl) up to a radius of 1.5 - 2 sq.ft. around the affected area. Leave the diluted acid onto the surface for 15 - 20 minutes and thereafter, wash the surface with water. Once the surface has fully dried, apply SmartCare Damp Block as per the recommended application procedure. SmartCare Damp Block can only be used for walls affected with moderate efflorescence after treating the affected area with acid as explained above. Direct application of SmartCare Damp Block on efflorescence is not advised.

23) While waterproofing, why is it recommended to cover an area beyond the affected portion?

Water generally finds the path of least resistance through the substrate and affects the topcoat of paint in the form of paint peeling or damp patches. So, when only the affected area is blocked with an anti-damp coat, the water will try and find the next available path to reach the surface and start affecting the portion of the wall immediately next to the treated area. Hence, it is recommended that when treating an affected area with Damp Block, one should mark an area of 2 ft. beyond, on all sides for Damp Block application.

24) Why is it recommended to envelop the entire terrace with Damp Proof instead of just treating the affected portion?

Since more often than not, it is difficult to identify the entry point or source of water due to which the walls on the interiors get affected, by enveloping the entire terrace with Damp Proof, we ensure that all the entry points are blocked and water cannot penetrate into the substrate.

25) What is the crystalline technology in the new and improved Damp Block?

The conventional concrete matrix has a number of micro cracks, pores and capillary tracts through which water enters the concrete.

The special ingredients in Damp Block react with water and elements like calcium hydroxide and aluminium to form insoluble crystals. These crystals fill the voids and cracks and block the passage of water, thus making the concrete waterproof. Normally, these crystals lie dormant but when water reappears, the crystalline growth is resumed, thus filling up newly formed pores. Though these crystals block water, they are breathable enough to allow water vapor to pass through, thus preventing vapor pressure buildup. With this advanced crystalline technology, Damp Block offers the best-in-class negative side waterproofing for interior dampness problems.

26) How is SmartCare Damp Proof better than conventional waterproofing methods like Brick Bat Coba and Bituminous Coatings?

Traditional terrace waterproofing methods like Brick Bat Coba add unnecessary load, damage the structure and are expensive. Bituminous coatings on the other hand are tedious to apply and not the most durable. Both, Brick Bat and Bituminous restrict the use of terrace due to excessive heat and give poor insulation properties. Damp Proof is based on the latest liquid applied elastomeric membrane technology which is most advanced for terrace waterproofing. It is easy to apply, durable and has recon fiber which allows the accessibility to terrace even with moderate foot traffic. It is also the most cost effective in comparison to traditional methods.

27) What are Adhesives?

Adhesives are polymer and cement based mixtures used for application of tiles and natural stones (marble, granite etc.).

28) Why are Adhesives better than traditional/ conventional cement-sand mix?

Quality Assurance: Unlike the Cement-Sand mix in which there is no control over the quality of material used and the ratio in which they are manually mixed, SmartCare Tile Adhesives are factory-manufactured using pre-mixed cement, sand and special additives.

100% Contact: A Cement-Sand mix is applied at the back of tiles while Adhesives are applied to the surface (on which tiles are to be fixed) directly using notched trowels. The quality of the material and the procedure of application ensures that there is 100% contact between the Tile and the substrate, resulting in proper fixing.

Durability: Tiles fixed with Adhesives are much more durable because adhesives offer high bond and shear strength, low water absorption and have good shock resistance.

Labor And Time: Fixing of tiles using Adhesives is much quicker and less labor intensive than using cement-sand. For example:

1. Tiles fixed using adhesives require no pre-soaking or wet curing.
2. A greater quantity of adhesives can be mixed at the beginning itself unlike cement-sand where the applicator has to constantly re-make smaller mixes because the material dries up too quickly.

Aesthetics: Tile fixing using adhesives can be done from any corner preventing inappropriate cutting of tiles for better aesthetics. A tile once applied using adhesives can also be adjusted for a few minutes post fixing, unlike cement-sand where it sets quickly.

Tile on Tile Application: Only an Adhesive formulated exclusively for application of tiles on existing tiles is suited for this purpose. Cement-Sand mixes cannot be used for tile on tile application.

28) What type of water should be used for mixing with the Adhesives?

Normal potable tap water should be used for mixing of tile adhesives.

29) What to do in case of Tile-on-Tile Application when an existing Tile cannot be completely repaired?

If it is just the replacement of a single tile area then that area can be leveled with the tile adhesive itself. However, if there are many pot holes of uneven size and shape, then they need to be covered with polymer modified mortar followed by tile fixing with the tile adhesive.

30) What to do in case of Tile-on-Tile Application when the existing Tile is glossy?

If the gloss is too high then the tile needs to be roughened by means of a mechanical grinder and then the area needs to be washed with water to remove loose dust particles, prior to adhesive application.

31) For fixing of Marbles, should the grey cement based adhesives be used or the white cement based Glass Tile Adhesive?

Grey cement based adhesives can be used for fixing marbles on horizontal surfaces, however due to their grey colour, grey stains might appear on the marble surface and hence it is advisable to use the white cement based Glass Tile Adhesive.

32) Can Tile Adhesive for Tile-on-Tile Application be a substitute for Tile Adhesive for Normal Application?

Yes it can, but please keep in mind that it is also more expensive.

33) Why are Grouts better than traditional/ conventional white cement?

Excellent Adhesion: Grouts are sustainable and durable up to the life of the tile.

Joint Filling Ability: Depending on the type of Asian Paints SmartCare Tile Grout used, joints up to 5mm or 10mm can be easily filled (as a healthy construction practice a gap of at least 1.5 to 2mm should always be left between tiles).

Waterproof: Unlike ordinary white cement, Asian Paints SmartCare Tile Grouts are impervious ensuring excellent water resistance.

Easy to Clean: Compared to white cement, which is easily stained, tile grouts are easy to clean.

Low Shrinkage: Tile grouts offer low shrinkage compared to conventional white cement.

Aesthetics: Asian Paints SmartCare Tile Grouts are available in multiple shades while white cement can at most be manually mixed with powdered colorants. The mixing and shade in the latter may or may not be proper.

34) What Tile Grouts are offered by Asian Paints?

Asian Paints SmartCare offers 2 tile grouts, specifically designed for the Indian market:

1. **Tile Grout – Cement Based:** Available in 7 factory made shades in powder form. It can be used for joints up to 5mm
2. **Tile Grout – Epoxy Based:** Available in 26 shades (that can be tinted using Asian Paints Dealer Tinting System – Colour World), this is a 2 component system consisting of a Tintable Base and Hardener that can be used for joints up to 10mm.

35) What is the difference between Cement Based and Epoxy Based grout? Is the Epoxy Based grout better?

Asian Paints SmartCare Tile Grout – Epoxy Based is a premium 2 component epoxy resin based product that, in addition to having all the features of the Cement based grout, also has the following advantages:

1. **Number of Shades:** 26 shades that can be tinted using the DTS.
 2. **Joint Filling Ability:** Up to 10mm.
 3. **Chemical Resistance:** Epoxy based grout offers excellent chemical resistance making it ideal for areas, which are prone to high chemical impact like industries, swimming pools etc.
 4. **Areas of Use:** In addition to normal usage, Epoxy Based grout is specifically suited for areas that require a hygienic and sterile condition like hospitals, kitchens, food industry etc.
-



Asian Paints Limited, 6A, Shantinagar, Santacruz (E), Mumbai - 400 055, India.