

GUIDE TO INSTALLING PLASTERED LIGHTWEIGHT MOULDINGS



ACCUMEN[®]
SHAPES

Accumen Shapes Limited

89 Huia Road | PO Box 22675, Otahuhu 1640

09 270 9228 | accumen.co.nz

TABLE OF CONTENTS

INTRODUCTION	3
COMPOSITION	4
APPLICATIONS	5
ADVANTAGES OF KICKIT® PLASTERED LIGHTWEIGHT MOULDINGS.....	6
INFORMATION YOU SHOULD CONSIDER.....	7
INSTALLING	8
JOINING	10
OPTION 1: BUTT JOINT.....	10
OPTION 2: MESHED SURFACE JOINT (MOULDING WITHOUT RECESSED ENDS).....	11
OPTION 3: MESHED RECESSED JOINT (MOULDING WITH RECESSED ENDS).....	11
OPTION 4: CORNER MITRES.....	12
OPTION 5: EXPRESSED JOINT METHOD (EXPANSION AND CONTRACTION/CONTROL JOINT)	12
CONTROL JOINT (EXPANSION & CONTRACTION JOINTS)	13
EXTERNAL COATINGS ON INSTALLED MOULDINGS.....	14
DURABILITY	16
MAINTENANCE	17
GUIDES FOR SPECIFIERS, DESIGNERS & INSTALLERS.....	18
(1) GUIDE FOR ARCHITRAVES	19
(2) GUIDE FOR CILLS	20
(3) GUIDE FOR CORNICE DETAIL/DADO LINE	21
(4) GUIDE FOR CORNICE DETAIL/DADO LINE WITH TIMBER BATTEN	22
(5) GUIDE FOR LARGE DETAIL.....	23
(6) GUIDE FOR LARGE DETAIL WITH ALUMINIUM ANGLE.....	24
(7) GUIDE FOR INSTALLING COLUMNS.....	25
USING TIDYUP® ADHESIVE	27
SUPPLIERS OF FIXINGS REQUIRED WHEN INSTALLING ACCUMEN® DECORATIVE DETAILS	28
WARNING.....	29

INTRODUCTION

KickIt® plastered lightweight mouldings are easy to fix mouldings of many sizes and shapes, from smaller architrave moulds, to larger parapet and dado moulds which are lightweight using kiln dried CFC-free construction grade EPS, coated on the exposed surface with fibreglass mesh and KickIt® plaster to increase surface strength.

KickIt® plastered lightweight mouldings are compatible with most adhesive plaster and plaster on the market.

KickIt® plastered lightweight mouldings are impact resistant, have useful life equal to any traditional method and are not attacked by rodents, insects or birds.

Mouldings are normally made from 1.2m up to 2.7m long, however longer lengths can be manufactured depending on shape.

Decorative mouldings may be water repellent in themselves, but due to the diverse situations they may be used in, they are not to be used as a weathertight material. Architects and competent tradespersons must follow professional trade specifications for the application of a weathertight membrane on the building **before** fixing Accumen Shapes Ltd decorative products. We strongly recommend that informed and competent installers fix the mouldings and shapes.

COMPOSITION

The makeup of the KickIt® plastered lightweight mouldings is kiln dried CFC-free construction grade EPS, computer cut to any shape or form and coated with fibreglass mesh and KickIt® base coats and top coat plaster.

The plaster is applied using skillfully manufactured trowels made to the shape required.

The end result is a product that is very easy to handle with a lower volumetric weight than that of other shapes of its same size.

Although Accumen pre-plastered shapes are robust, **they are not load bearing.**



APPLICATIONS

KickIt® plastered lightweight mouldings can be specified for:

- architraves
- cornices
- string course
- dado lines
- quoins
- columns (square, round, tapered)
- capitals
- plinths
- corbels
- signage
- skirting
- 3D moulds
- chimney surrounds
- many other areas



ADVANTAGES OF KICKIT® PLASTERED LIGHTWEIGHT MOULDINGS

- Attractive cost-effective building product compared to the historical method
- Larger shapes can be made and be man handled without heavy lifting machinery e.g. cranes and forklifts
- Can be cut with concrete handsaw or masonry disk in electric saw
- Can be used in commercial and residential applications
- Can give designers freedom to explore more in-depth shapes
- Can totally reinvent and reshape the ambience of a flat simplistic building
- Can be installed using standard builder and plastering tools
- Can be moulded into most 3D shapes and profiles

INFORMATION YOU SHOULD CONSIDER

Decorative

Decorative mouldings may be water repellent in themselves, but due to the diverse situations they may be used in, they are not to be used as a weathertight material. Architects and competent tradespersons must follow professional trade specifications for the application of a weathertight membrane on the building **before** fixing Accumen Shapes Ltd decorative products. We strongly recommend that informed and competent installers fix the mouldings and shapes.

Movement

Buildings do not remain static, and the amount of movement that occurs may depend on:

- temperature
- material thickness
- colour (dark colours should be avoided – see PAINT section on page 14)
- exposure to the sun
- location on the building
- fixing methods

Mouldings may also be affected by the above factors and therefore **Control Joints may be required to avoid subsequent cracking after fixing.**

INSTALLING

A GUIDE TO INSTALLING KICKIT® PLASTERED LIGHTWEIGHT MOULDINGS

We recommend that informed and competent tradespersons install the mouldings.

Mesh

Any mesh used in conjunction with mouldings must be alkali resistant.

On Delivery

Check that product is removed from all wrapping.

Check that product is the correct shape and is appropriate as ordered for the job.

Check that the correct quantity is delivered (count the lengths) as per the packing slip

- When carrying decorative details, avoid damage by supporting the product correctly.
- Avoid back injury by bending your knees when picking up the Accumen® decorative details and use two men if required.
- To avoid plastering and fixing problems, keep all products clean and dry on site. Follow the plaster and adhesive plaster manufacturer's instructions.
- KickIt® lightweight decorative details may be cut with a concrete hand saw, preferably used in conjunction with a mitre box, or use a standard electrical mitre saw with a masonry cutting blade. Remember to ensure that safety guards work and wear WorkSafe approved protective eyewear.
- Make sure that the area in which you work has WorkSafe approved safe scaffolding.
- Check that the wall area where you are applying the decorative details is straight and has no hills or gullies greater than +3mm or -3mm.
- Check the plans to ensure that the Accumen® decorative details supplied are the correct ones for the area, especially when you are supplied with different mouldings for different areas.

- When using TidyUp® adhesive plaster, check the surface you are fixing the moulding to is compatible.
- If you are using another type of adhesive, check that both surfaces are compatible.
- Surfaces must be clean and dry.

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Construction using Accumen Shapes Ltd products must be in accordance with good building practice, in accordance with the New Zealand Building Code and all statutory and relevant New Zealand standards.

Mechanical Fixings

The use of TidyUp® adhesive plaster to install mouldings *in conjunction with stainless steel fixings is recommended, however galvanized fixings could be used in some situations.*

Mechanical fixings come in nails, screws, tappets and bolts.

The centres of these mechanical fixings may vary from 0.8m to 1.6m centres, depending on the size and weight of the moulding that is to be installed.

Because of the endless different situations KickIt® lightweight mouldings go on to, a case by case discussion with the manufacturer should be undertaken. Some guides are given at the end of this part of the booklet.

Spreading TidyUp® Adhesive Plaster

Spread on an even 3 to 5mm thick coat of TidyUp® Adhesive Plaster with a notched trowel, on the back face of the moulding. Apply moulding to appropriate area and bed into the wall with firm pressure, moving moulding slightly a couple of times from left to right or up and down to ensure even spread of adhesive plaster. This eliminates any air trapped under the moulding and creates a small vacuum between the two surfaces helping the adhesion process.

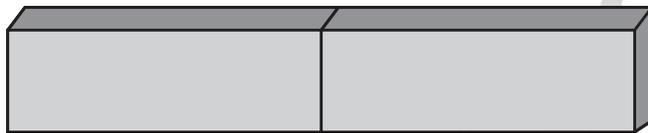
JOINING

A GUIDE TO JOINING KICKIT® PLASTERED LIGHTWEIGHT MOULDINGS END TO END

- Joints may be difficult to hide and they may show up in certain light.
- Each fixing method will vary depending on size and type of moulding and type of building.
- It is recommended that TidyUp® Adhesive Plaster be used on the joints (TidyUp® has been designed to make the joints less visible).

Option 1: BUTT JOINT

Could be used on small mouldings in conjunction with Control Joints
– refer page 13

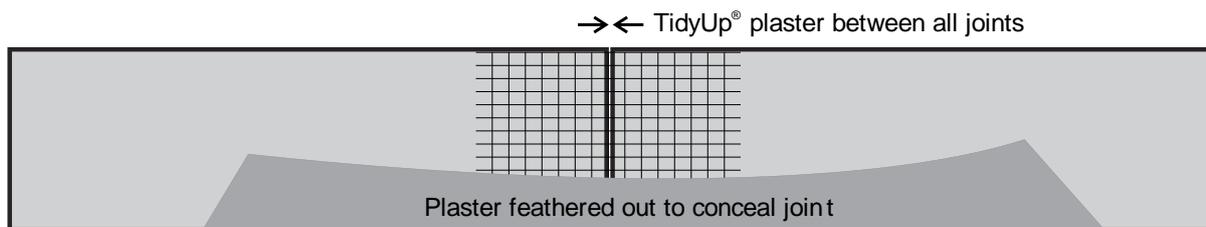


Butt Joint cut at 90 deg to wall

- Butter both ends of the new joint with TidyUp® Adhesive Plaster.
- When installing the moulding, close the joint up tight once in the correct position and fix in place. Re-skim the joint until all surfaces are flush.
- Once dry, sand.
- Re-skim the joint and feather out to avoid any possible bulges with matching finish plaster.
- Once dry, sand again.
- Another skim may be required to make good.

Option 2: MESHED SURFACE JOINT (moulding without recessed ends)

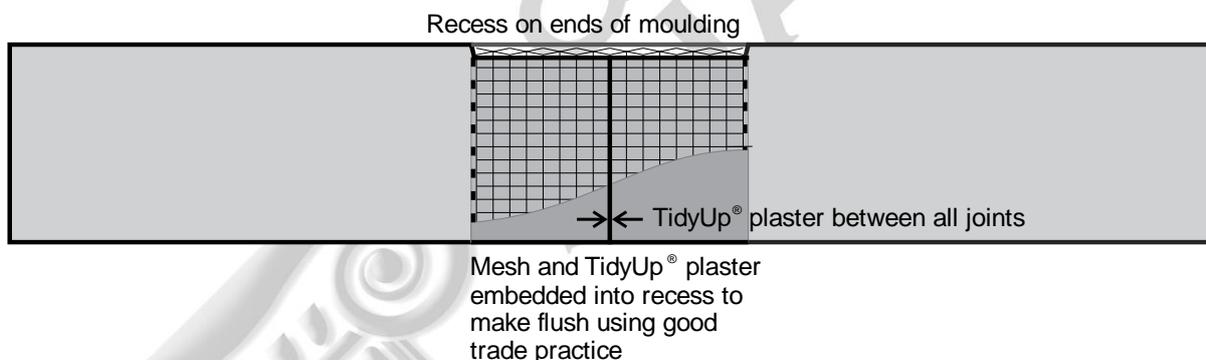
Used in conjunction with Control Joints – refer page 13



- Butter both ends of the new joint with TidyUp® Adhesive Plaster.
- When installing the moulding, close the joint up tight once in the correct position and fix in place. Re-skim the joint until all the surfaces are flush.
- Embed mesh and TidyUp® Adhesive Plaster on top of joint and feather out.
- Once dry, sand.
- Recoat complete moulding ensuring that the build-up hides any bulges in the joints.

Option 3: MESHED RECESSED JOINT (moulding with recessed ends)

Used in conjunction with Control Joints – refer page 13



Order the moulding with a recess on each end of the square butt join.

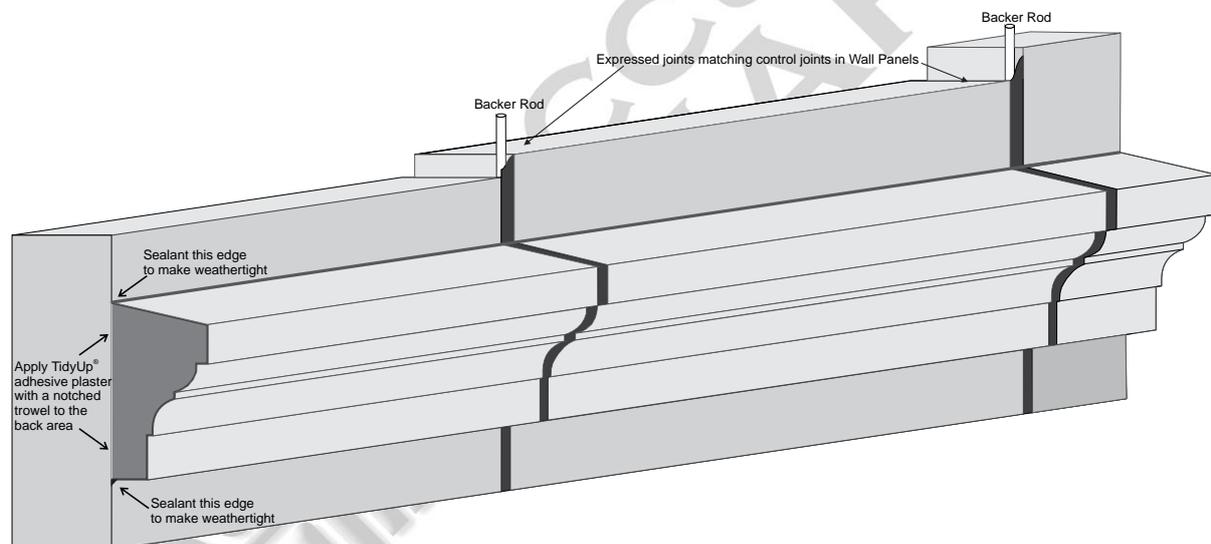
- Butter both ends of the new joint with TidyUp® Adhesive Plaster.
- When installing the moulding, close the joint up tight once in the correct position and fix in place. Apply more TidyUp® Adhesive Plaster to recess, embed mesh, flush off, and feather out to avoid any possible bulges.
- Once dry, sand.
- Re-skim the joint with matching finish plaster.
- Once dry, sand again.
- Another skim may be required to make good.

Option 4: CORNER MITRES

- Depending on size and position of corner mitre, option 2 or option 3 may need to be followed.
- Corner mitres should be cut as accurately as possible.
- Butter both ends of new mitre joint with TidyUp® Adhesive Plaster.
- When installing the moulding, close the joint up tight once in the correct position and fix in place. Re-skim the joint until all surfaces are flush.
- Once dry, sand.
- Re-skim the joint.
- Once dry, sand again.
- Another skim may be required to make good.

Option 5: EXPRESSED JOINT METHOD (Expansion and Contraction/Control Joint)

Due to visual or structural reasons, each short or standard length may be required to be a Control Joint. Refer to page 13 for details.



CONTROL JOINT (EXPANSION & CONTRACTION JOINTS)

A GUIDE TO INSTALLING CONTROL JOINTS

As the plaster coatings on the EPS mouldings are principally a modified cement base material, there may be some slight differential expansion and contraction compared with the attaching wall, and consequently in some situations it may be advisable to leave a control joint between the lengths of moulds.

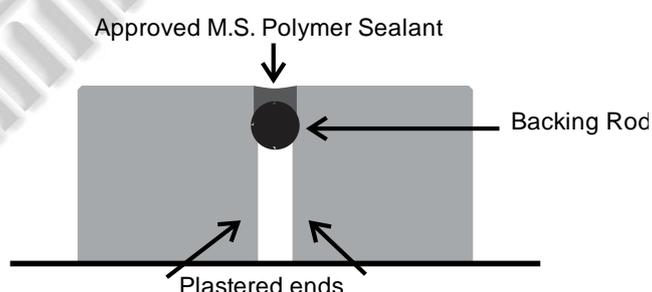
Locations of control joints shall vary depending on the type of building. They could vary from 1.2m to 5.4m centres. **Control Joints in the underlying structure must also be followed.**

To create Control Joints, you will require:

- M.S. Polymer Sealant
- Primer
- Masking Tape
- Backing Rod

An industry-appraised Sealant should be used and the manufacturer's specification for control joints should be followed.

When installing the moulding, the control joint is plastered off at the two ends. The small remaining parallel gap should be the distance apart recommended by the sealant supplier. As a general guide, no more than 10mm wide with the backing rod sitting no less than 5mm deep in the gap is satisfactory. The use of a backing rod is required so as to help achieve the correct ratio of width to depth with sealant. Check the end of the moulding that is to be used for the control joint is clean and undamaged.



An Expansion Joint correctly installed using a backing rod, primer, masking tape and a good M.S. Polymer Sealant is unlikely to fail.

When purchasing the sealant, ask the sealant distributor for advice on using the sealant and primer for this application.

On completion some Control Joints will be visible but are required.

EXTERNAL COATINGS ON INSTALLED MOULDINGS

Mouldings must be either painted or recoated in a specifically designed plaster.

PLASTER

KickIt® plastered lightweight mouldings are supplied in most cases with either a trowel sponge finish or a smooth finish.

- If the mouldings are to be recoated with another coat of plaster once the mouldings are installed, then it is important to check with Accumen Shapes Ltd before applying another form or type of plaster.
- There are a large variety of plaster products available on the market that can be used, but it is important that the application and instructions be followed with particular care taken in all areas.

PAINT

Any small gaps that may have appeared between the moulding and the wall should be filled by applying an industry-appraised M.S. Polymer Sealant.

The same preparation and application of any paint going on to the moulding should be the same instructions that a paint company would give for applying any paint on to a plastered wall. It is important to follow these instructions with care.

PAINT COLOUR

LRV (Light Reflectance Value) is a measurement that tells you how much light a colour reflects, and conversely how much it absorbs.

LRV runs on a scale from 0% to 100%. Zero being absolute black and 100% being a perfectly reflective white. Dark colours with low LRV tend to reflect little light while absorbing lots of heat energy, whereas light colours with high LRV reflect a lot of light and absorb less heat energy.

The LRV of the paint colour that is to be applied over decorative details, must be as per the specification of the plaster system or cladding company.



DURABILITY

The durability of mouldings would expect to be at least the lifetime of the building provided the mouldings are installed and used in accordance with the limitations and instructions of the manufacturer and standard regular maintenance is applied.

Please refer to the following section on Maintenance.



MAINTENANCE

Any accumulation of dirt or similar that may occur should be regularly removed from the external surface by cleaning with warm water and detergent and a soft broom. Solvent-based cleaners should not be used.

Like any standard cladding system, the moulding should be checked annually for damage and possible water entry. Any damage which may have occurred must be repaired in accordance with the manufacturer's instructions.

Any paint film damage must be repaired as soon as possible.

It may be necessary to repaint the building in accordance with the paint manufacturer's instructions at certain intervals. The paint manufacturing company should be contacted to confirm the life expectancy of the paint system.



GUIDES FOR SPECIFIERS, DESIGNERS & INSTALLERS

The following drawings are not a complete detailed comprehensive range but do represent a guide to a typical application.

They are designed to assist specifiers, designers and installers.

If you wish to modify or discuss a drawing or you have a specific detail that you require that is not shown here, please contact Accumen Shapes Ltd to discuss your requirements.

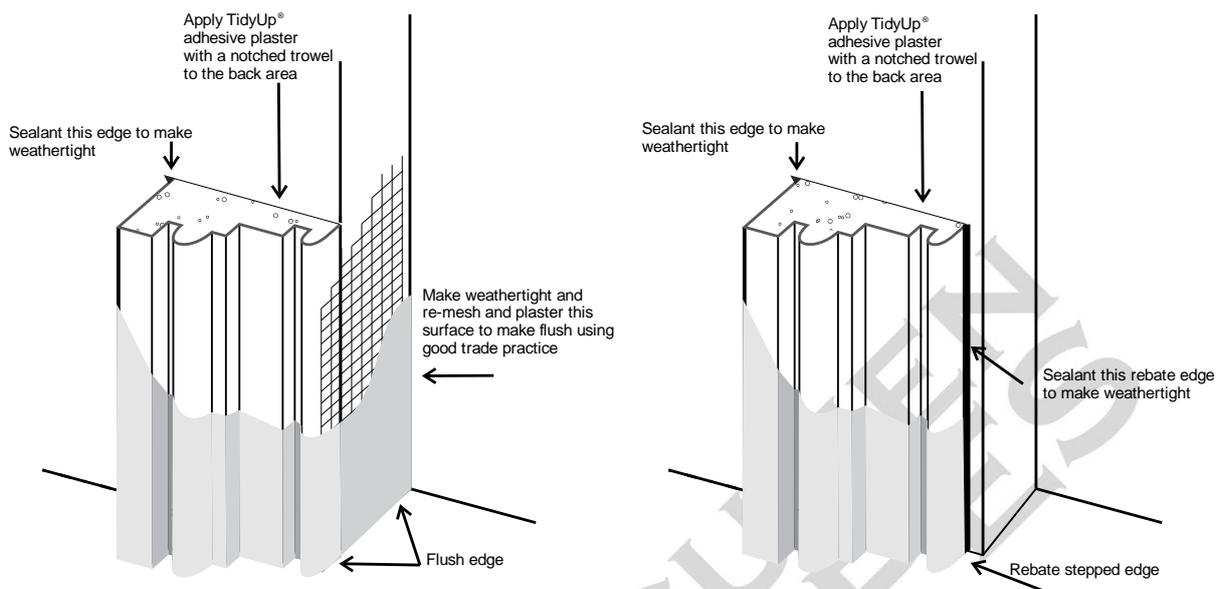


(1) GUIDE FOR ARCHITRAVES

Option 1 (flush finish)

or

Option 2 (rebate finish)



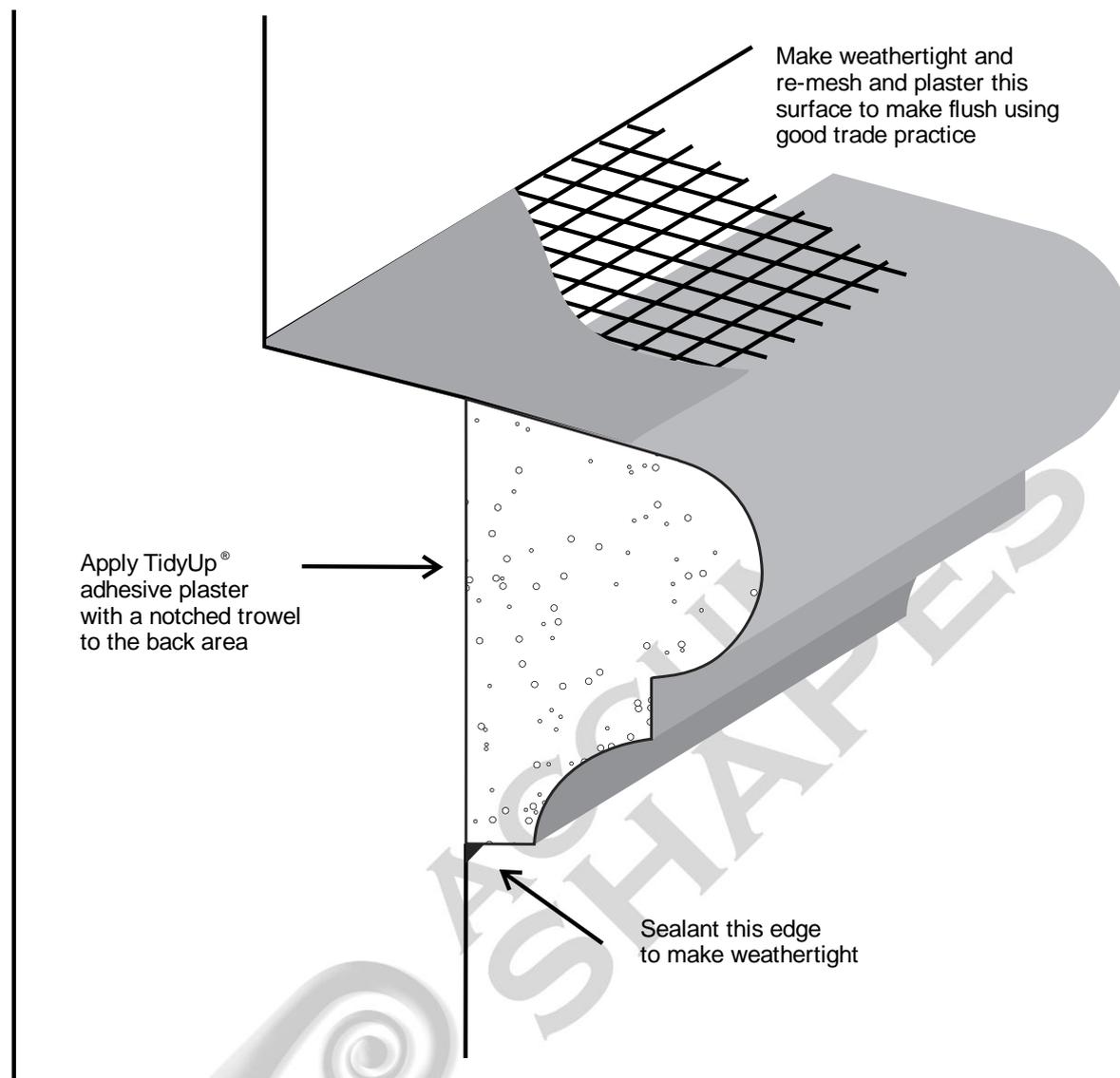
Mechanical Fixings

The use of TidyUp® adhesive plaster to install mouldings in conjunction with mechanical fixings is recommended.

Mechanical fixings come in nails, screws, tappets and bolts, designed for fixing products to a surface. The centres of these mechanical fixings may vary from 0.8m to 1.6m centres, depending on the size and weight of the moulding that is to be installed. The head of the mechanical fixing together with a large washer should be installed to go below the surface of the moulding. The hole that is made should be plastered and meshed, sanded when dry, reskimmed flush and then sanded again when dry.

Please refer to the section "Suppliers of fixings required when installing Accumen® decorative details".

(2) GUIDE FOR CILLS



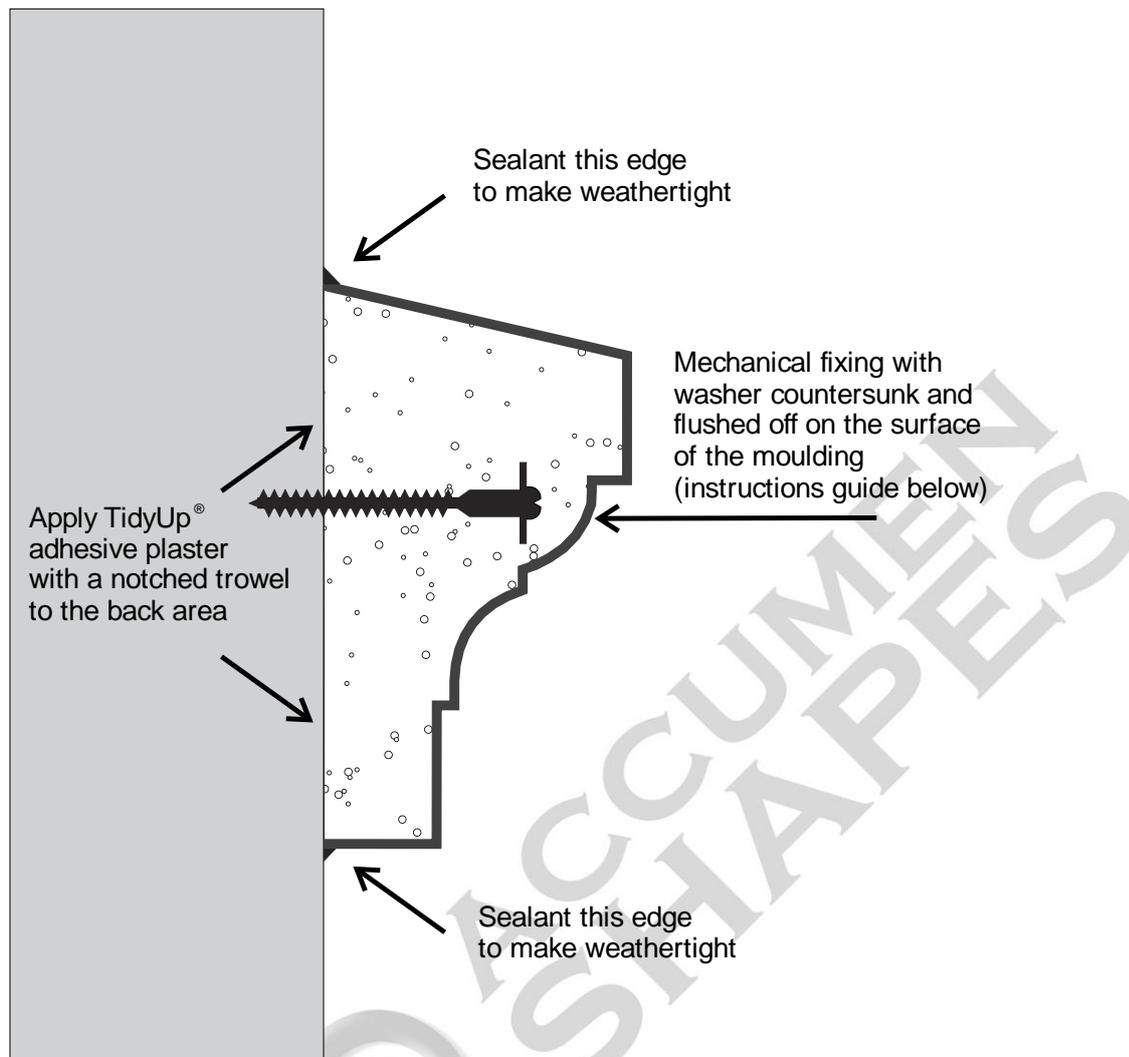
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(3) GUIDE FOR CORNICE DETAIL/DADO LINE



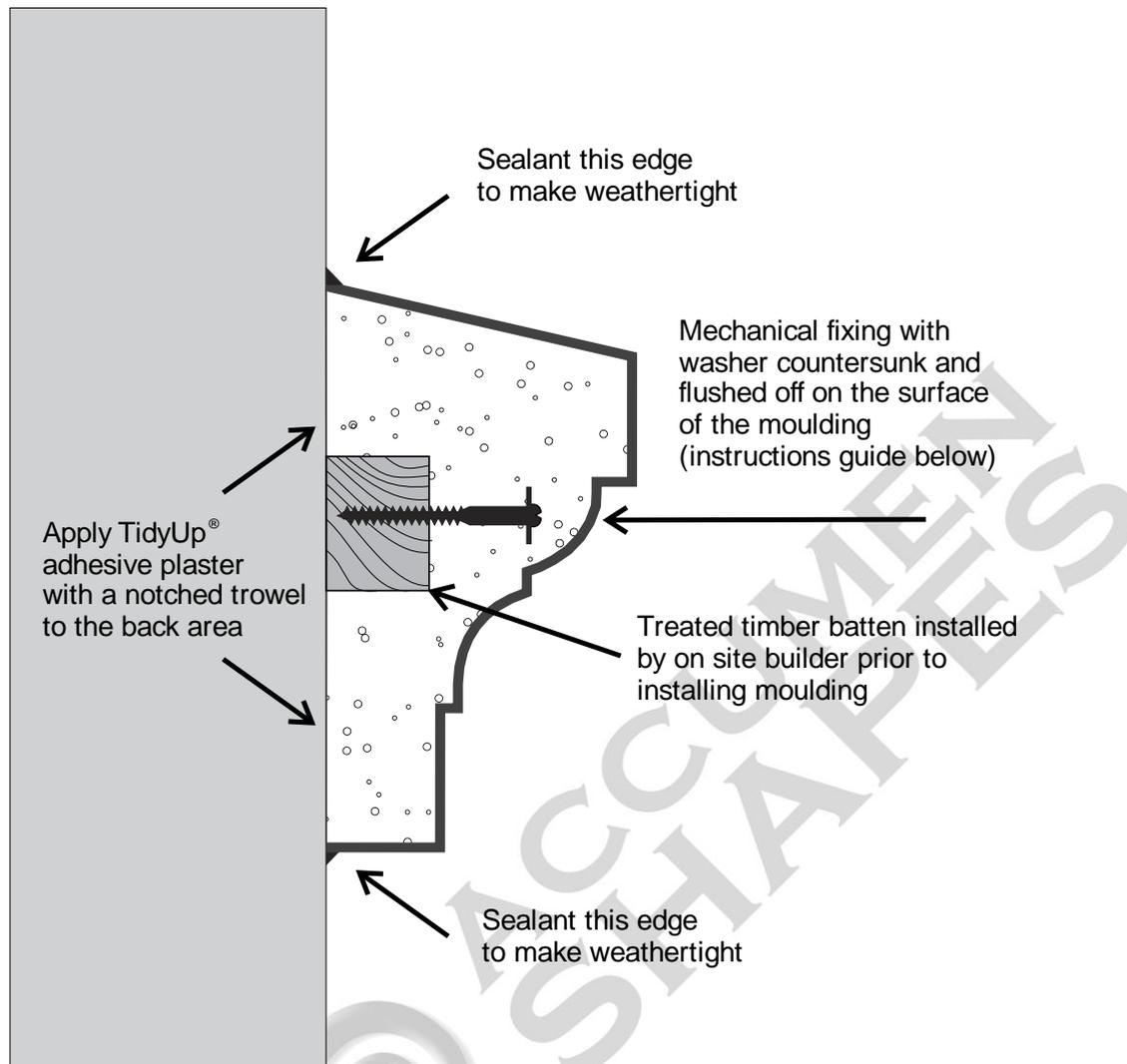
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Please refer to the section "Suppliers of fixings required when installing Accumen® decorative details".

(4) GUIDE FOR CORNICE DETAIL/DADO LINE with TIMBER BATTEN



Mechanical Fixings

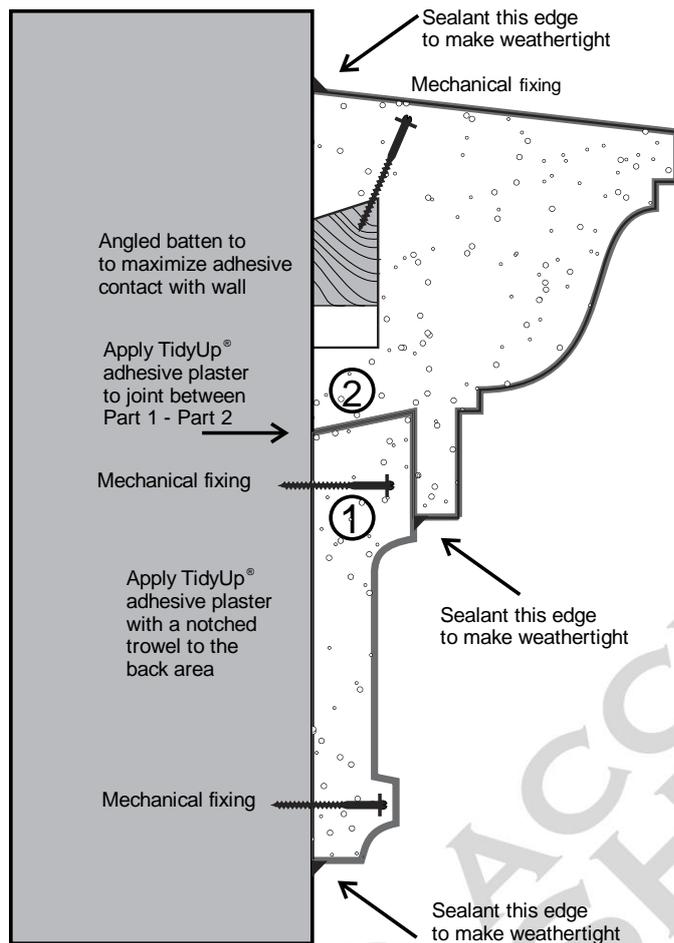
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Please refer to the section "Suppliers of fixings required when installing Accumen® decorative details".

(5) GUIDE FOR LARGE DETAIL

(Moulding installed in two sections)



- Moulding 1 is installed with a mechanical fixing prior to moulding 2 being installed on top. The batten method as shown on prior page could also be used.

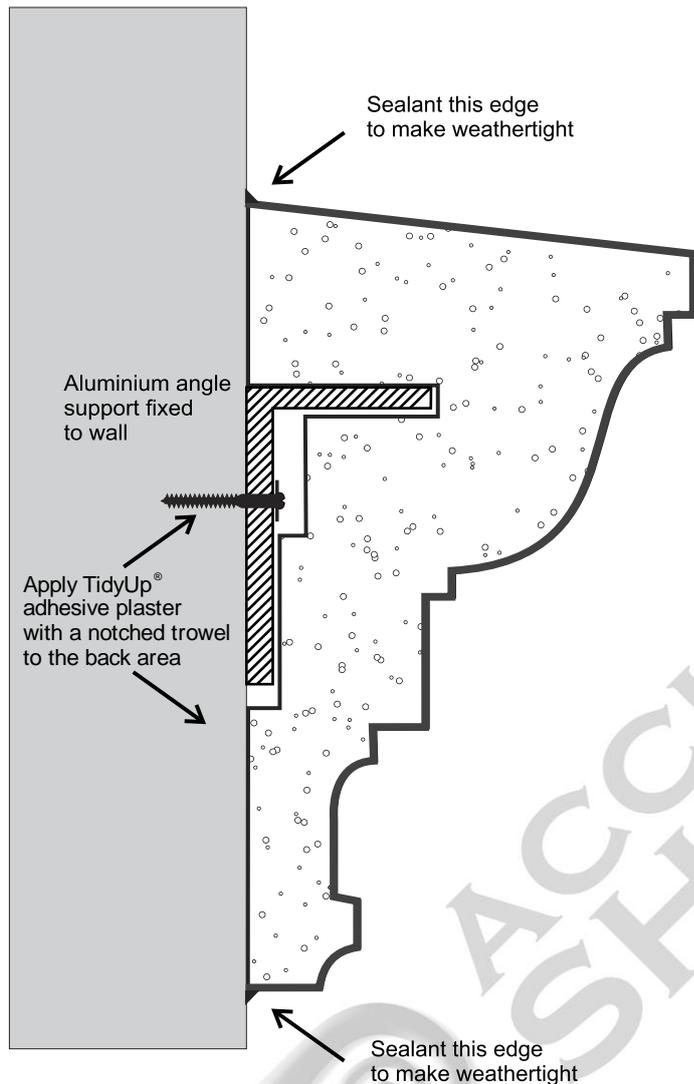
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Please refer to the section "Suppliers of fixings required when installing Accumen® decorative details".

(6) GUIDE FOR LARGE DETAIL with ALUMINIUM ANGLE



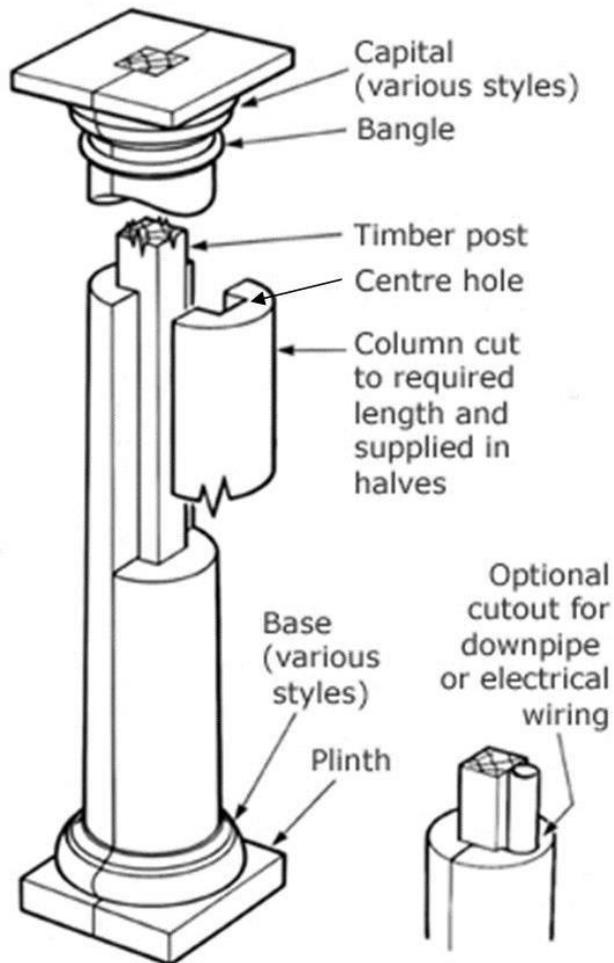
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Please refer to the section "Suppliers of fixings required when installing Accumen® decorative details".

(7) GUIDE FOR INSTALLING COLUMNS



Installing Column Halves

1. Ensure the centre hole in the column is larger than the size of the post that the column is to be installed on (10mm or more is a general guide to allow for adhesive).
2. Measure the height of the area the column is to be installed.
3. Cut the column length 10mm less than the height measured.
4. Place recommended adhesive on one half of the centre post (left or right side).
5. Install one half of the column and apply pressure to ensure the adhesive adheres well to the column.
6. Skim TidyUp[®] adhesive to the face of the column that the second half of the column is going to go up against.
7. Install second half of the column to the centre post. Ensure the two halves are tight together with only a narrow distance holding the two halves apart due to the TidyUp[®] adhesive plaster.
8. Tie wire or string around the column halves and pull tight to keep the two halves together.

9. Scrape off any excess TidyUp® plaster on the joins and let dry.

The column joint method you choose depends on how the column was supplied and how you wish to finish the column joint. In the majority of cases it will be one of the following methods:

Refer to page 10 – “A Guide to Joining KickIt® Plastered Lightweight Mouldings End to End”

Option 1: Butt Joint – for very narrow columns only

Option 2: Meshed Surface Joint – for columns without recessed ends

Option 3: Meshed Recessed Joint – for columns with recessed ends

Please Note: If columns are higher than normal, requiring one column to be installed on top of the other, use one of the options above to tidy up the horizontal joints.

Installing Column Capitals, Bases or Plinths

Please Note: In some cases, the capital may already be fixed to the column halves.

1. Check that the capital or bases fit around the column by temporarily installing them without adhesive.
2. Once fit has been confirmed, apply TidyUp® adhesive plaster to the inside of both half round capitals or bases and the ends that will butt together.
3. Install one half around the column and then the second half, ensuring the two halves are tight together.
4. Tie wire or string around the halves and pull tight to keep the two halves together.
5. Wipe off any excess TidyUp® plaster.
6. To finish off joint and make good, refer to Page 10 “A Guide to Joining KickIt® Plastered Lightweight Mouldings End to End”

NOTE BEWARE: With ShapeCrete® capitals, it is extremely important to install mechanical fixings through the capital and into either the centre post or the soffit area to minimize risk of the capital falling.

For any further information on installing columns, capitals, bases or plinths, please contact Accumen Shapes Limited.

USING TIDYUP® ADHESIVE

PLEASE READ BEFORE INSTALLING ANY MOULDINGS

TidyUp® adhesive

TidyUp® adhesive is a modified cement based adhesive plaster that is to be used by tradespersons for installing decorative details manufactured by Accumen Shapes Ltd.



TidyUp® adhesive is designed for fixing architectural mouldings to a weathertight surface using a notched trowel; buttering the end of a length of architectural moulding when creating a joint end to end or a control joint; using with mesh embedded to create a surface joint; repairing imperfections due to mechanical fixings being installed; or repairing any damage to the surface that may inadvertently occur whilst installing architectural mouldings.

MIXING INSTRUCTIONS

- Prior to application, surface must be cleaned from any contaminants that may affect the adhesion.
- The estimated required amount should be placed in a suitably sized bucket (5,10 or 20 litre).
- After making a hollow in the powder, pour in a small amount of water.
- Using a mechanical mixer, proceed to mix slowly adding more water until an even well mixed trowelable consistency is achieved.

Health, Safety and Handling

TidyUp® adhesive can be cleaned off any equipment with water provided the product hasn't dried out (dabbing dried plaster on tools with diesel and left overnight will assist removal). **DO NOT PERMIT** waste-water to run off into the sewer, storm water, or open bodies of water. The powder is an irritant. Observe normal precautions for handling alkaline products. Wear an approved dust protection mask and gloves. Avoid skin contact.

SUPPLIERS OF FIXINGS
REQUIRED WHEN INSTALLING
ACCUMEN® DECORATIVE DETAILS

Fixings may be obtained from your local hardware store or from the following suppliers:

MECHANICAL FIXINGS

- | | | |
|-------------------------|--------------|-------------------------------------|
| ● Ramset New Zealand | 0800 726 738 | Head Office for your nearest branch |
| ● Hilti New Zealand Ltd | 0800 444 584 | Head Office for your nearest branch |
| ● Anzor | 09 273 2121 | Head Office for your nearest branch |

BACKING RODS

- | | |
|-------------------------|------------------|
| ● Ramset New Zealand | details as above |
| ● Hilti New Zealand Ltd | details as above |

JOINTING MESH (rolls of mesh 90mm wide)

- | | |
|----------------------|-------------|
| ● Accumen Shapes Ltd | 09 270 9228 |
|----------------------|-------------|

MS SILICONE

- | | | |
|------------------------------|--------------|-------------------------------------|
| ● Holdfast Manufacturing Ltd | 0800 701 080 | Head Office for your nearest branch |
| ● Sika (NZ) Ltd | 0800 745 269 | Head Office for your nearest branch |

TIDYUP® PLASTER

- | | |
|----------------------|-------------|
| ● Accumen Shapes Ltd | 09 270 9228 |
|----------------------|-------------|

ALUMINIUM ANGLE

- | | |
|----------------------|--------------|
| ● Accumen Shapes Ltd | 09 270 9228 |
| ● Ullrich Aluminium | 0800 500 338 |

WARNING

Decorative mouldings may be water repellent in themselves, but due to the diverse situations they may be used in, they are not to be used as a weathertight material. Architects and competent tradespersons must follow professional trade specifications for the application of a weathertight membrane on the building **before** fixing Accumen Shapes Ltd decorative products. We strongly recommend that informed and competent installers fix the mouldings and shapes.

The information contained in this booklet is true and accurate to the best of Accumen Shapes Ltd's knowledge. However, the performance data quoted herein is subject to variation dependant upon the quality of workmanship and other conditions of use, which may be entirely beyond the Company's control at time of installation. Any Accumen Shapes Ltd warranty is therefore limited to the quality of goods supplied.

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