RAINWATER SOLUTIONS

Water overflow in domestic rainwater systems

Under the Environmental Planning and Assessment Act 1979 and its Regulations, all building work must be carried out in accordance with the Building Code of Australia (BCA). In addition to referring to Australian Standards AS/NZS 3500.3 (2003), and AS/NZS 3500.5 (2000), the BCA also contains requirements for the disposal of surface water in Volume One, in Performance Requirements FP1.2 and FP1.3, and in Volume Two, in Part 3.5.2, namely, Performance Requirements P2.2.1 and Clauses 3.5.2.1 and 3.5.2.4.

The most common means to satisfy these requirements for roof drainage (e.g. guttering) installations is via compliance with the National Plumbing and Drainage Code AS/NZS 3500.3: 2003.

Furthermore, in each state and territory it is necessary to satisfy the relevant regulation. For example, the NSW Code of Practice for Plumbing and Drainage (2006) adopts AS/NZS 3500.3: 2003 and associated amendments. (Further information is available at www.deus.nsw.gov.au/water/plumbing.asp).

In the design and detailing of a roof drainage system consideration must be given to a range of the factors such as rainfall intensity, roof catchment area, gutter size/capacity, gutter fall, gutter outlets (sumps, rain-heads, nozzles), downpipe size, quantity and placement, overflow consideration, material selection, jointing, etc.

It is the responsibility of designers and installers of roof drainage systems to ensure compliance with these requirements.

IMPORTANT INFORMATION ON OVERFLOW MEASURES

For residential roof drainage systems, high fronted gutters are a popular aesthetic choice to hide the lower edge of tiles or roof cladding. Where high-fronted gutters are installed, the BCA (and AS/NZS 3500.3) requires that provision must be made to avoid any overflow back into the roof or building structure.

Some simple overflow control methods that can be employed on high fronted gutters are listed below. It is important to note that it may be necessary to use more than one of these measures to achieve the necessary result:

A) Methods related to the design and installation of roof drainage systems:
   • Slotted front of gutter – simple and popular choice which allows for water overflow through the slots visible on the front face of the gutter;
   • Specifically located non-continuous overflows as permitted in the BCA i.e.:
     - Inverted downpipe drop/pop at high points in the gutter but set at a level below the fascia top,
     - Stop ends cut down to a lower level to act as a weir (stop end weirs could be hidden at the high point of the gutter and designed as part of an expansion joint),
     - Rain-heads with overflow weir,
     - Holes, slot, or weir at downpipes;
     - Gap between the fascia and the gutter back – a packer is inserted between the gutter back and the fascia; or
   Any of a number of other proprietary systems and trade solutions.

B) Methods related to alternative building designs methods:
   • Unlined eaves – eliminates the issue where the house design suits.
   • Gutter installed such that the gutter front is fully and sufficiently below the top of the fascia (freeboarding).
   • Design for a higher rainfall intensity, as used for internal box gutters.
   • Back flashing – where gutter support brackets allow back flashing installation (e.g. external brackets).

The following illustrations show some typical continuous and non-continuous overflow measures that may be used in combination with each other or with other overflow measures to meet the necessary requirements.

Please note that non-continuous measures may become blocked anywhere along their length, so non-continuous overflow measures may not be sufficient to prevent water from flowing back into a building.

Slotted gutters may also provide an overflow measure, however slots must be of sufficient size. For this reason, slots alone may not be a sufficient overflow measure in all circumstances. When designing a roof drainage system with slotted gutter, consideration should be given to additional overflow measures.

Typical overflow from slotted gutter.

(Gutter shown is not available in all areas).
DESIGN AND INSTALLATION OF DOMESTIC ROOF DRAINAGE SYSTEMS

The detailing and sizing of the selected overflow method/s is normally completed by the designer/installer, but must be adequate for the situation and must meet the relevant performance requirements of the BCA and Australian Standards, including the requirements noted above.

While there may be some variations from state to state, contractors who install guttering systems are generally required to hold an appropriate licence. In NSW, for example, a licence in the category of Builder, Plumber or Roof Plumber issued by the Office of Fair Trading is required and it is an offence to undertake this work without an appropriate licence. The work is required to comply with the appropriate codes and standards.

Statutory warranties normally apply and consumers have a right to lodge a complaint and have it dealt with by the appropriate authority. In NSW, for example, the statutory warranty is 7 years under the Home Building Act.

In the installation of the roof drainage system, particular focus should be given to the following:

• Attention to the use of compatible materials for drainage system components, leaf-guard type system components and compatible fasteners/sealants to connect and seal the components.
• The position of the gutter in relation to the fascia (particularly whether there is a gap between the fascia and the gutter back and whether the gutter front is below the top of the fascia).
• Installation of the specified gutter and downpipes, ensuring that downpipes are installed in the correct locations and numbers.
• Gutter fall, ensuring sufficient fall and that it is in the direction of the downpipes.
• Overflow has been considered and specific details are installed where required as described above (such as when the gutter front is higher than the top of the fascia).

During the installation all debris and loose waste materials (swarf, fasteners, etc) must be cleaned off at the end of each day and at the completion of the installation to prevent blockages of the drainage system or deterioration of the individual components. Any protective films should also be removed as part of the installation process.

MAINTENANCE OF DOMESTIC ROOF DRAINAGE SYSTEMS

In the longer term, the ability of a roof drainage system to handle overflow will also depend on the regular cleaning of the system. For example the removal of plant or animal matter (leaves, fungal growth, dropping, nests, etc.) and debris from gutters, leaf-guard type systems and the gutter overflow devices to ensure free drainage of water.

To ensure the long life of the roof drainage system, the maintenance requirements of the roof drainage system should be forwarded to the occupier/owner of the building and should be fulfilled. Adequate maintenance is a requirement of rainwater goods warranties.
Information on designing a perimeter drainage system for a domestic roof

Roof drainage systems can be affected by a number of variables and must be designed and detailed by a suitably qualified trade or professional. The design of roof drainage aims to protect people, property and the building. The designed drainage system must be installed under the supervision of a qualified trade or professional. The steps of the design process are illustrated below.

1. Determine average recurrence interval (ARI).
2. Obtain rainfall intensity of site.
3. Work out roof dimensions.
4. Determined catchment area with slope.
5. Determine area for proposed eaves gutter.
6. Determine catchment area per downpipe.
7. Determine number of downpipes required.
8. Determine location of downpipes and high points.
9. Check catchment area for each downpipe.
10. Determine downpipe size.
11. Determine overflow measures.

### Table 1

Design rainfall intensities adapted from AS 2180:1986.

<table>
<thead>
<tr>
<th></th>
<th>For overflow of gutters once in 20 years mm/hr</th>
<th>For overflow of gutters once in 100 years mm/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT</td>
<td>137</td>
<td>194</td>
</tr>
<tr>
<td>Canberra</td>
<td>137</td>
<td>194</td>
</tr>
<tr>
<td>New South Wales</td>
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<td>Albury</td>
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<td>191</td>
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<tr>
<td>Armidale</td>
<td>154</td>
<td>219</td>
</tr>
<tr>
<td>Batemans Bay</td>
<td>211</td>
<td>279</td>
</tr>
<tr>
<td>Bathurst</td>
<td>143</td>
<td>197</td>
</tr>
<tr>
<td>Broken Hill</td>
<td>130</td>
<td>181</td>
</tr>
<tr>
<td>Cooma</td>
<td>129</td>
<td>183</td>
</tr>
<tr>
<td>Coonabarabran</td>
<td>178</td>
<td>247</td>
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<tr>
<td>Dubbo</td>
<td>159</td>
<td>221</td>
</tr>
<tr>
<td>Forbes</td>
<td>151</td>
<td>209</td>
</tr>
<tr>
<td>Glen Innes</td>
<td>159</td>
<td>219</td>
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<tr>
<td>Gosford</td>
<td>189</td>
<td>240</td>
</tr>
<tr>
<td>Goulburn</td>
<td>145</td>
<td>197</td>
</tr>
<tr>
<td>Inverell</td>
<td>179</td>
<td>251</td>
</tr>
<tr>
<td>Lismore</td>
<td>219</td>
<td>278</td>
</tr>
<tr>
<td>Mittagong</td>
<td>175</td>
<td>227</td>
</tr>
<tr>
<td>Muswellbrook</td>
<td>141</td>
<td>195</td>
</tr>
<tr>
<td>Newcastle</td>
<td>181</td>
<td>233</td>
</tr>
<tr>
<td>Nswra</td>
<td>219</td>
<td>280</td>
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<tr>
<td>Penrith</td>
<td>166</td>
<td>220</td>
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<td>Port Macquarie</td>
<td>223</td>
<td>290</td>
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<tr>
<td>Sydney</td>
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<td>273</td>
</tr>
<tr>
<td>Taree</td>
<td>190</td>
<td>241</td>
</tr>
<tr>
<td>Tweed Heads</td>
<td>245</td>
<td>303</td>
</tr>
<tr>
<td>Wollongong</td>
<td>233</td>
<td>284</td>
</tr>
</tbody>
</table>

### DESIGN PROCEDURE

The steps in the design process are for a perimeter drainage system using the standard roll-formed rainwater products (gutters) installed at the building eaves. Drainage systems for larger roofs use box gutters at the perimeter and internally. Box gutter systems are thoroughly treated in AS/NZS 3500.3:2003 and HB114:1998.

- Install gutters with a suitable fall to avoid ponding and to allow water to easily flow away. Steeper falls are preferred for prolonged life of the gutter. Refer to the BCA and the Australian Standards for guidance. Eaves gutters must have a gradient of 1:500 or steeper.
- Decide on the average recurrence interval (ARI). Where significant inconvenience or injury to people, or damage to property (including contents of a building), is unlikely (typical of an eaves-gutter system) a minimum ARI can be 20 years. If these conditions are likely (typical of box gutters) 100 years is recommended.
- Determine rainfall intensity for the site from Table 1. More data are in AS/NZS 3500.3:2003.
- Sketch a roof plan showing dimensions in plan view, pitch of roof, layout of ridges and valleys and large roof penetrations.
- Calculate the catchment area of the roof from the plan. To allow for the slope of the roof, increase the plan area by 1% for every degree of pitch up to 36°. For pitches over 36° refer to AS 3500.3: 2003.
- Get the effective cross-sectional area of the gutter you intend to use from Table 2.
- Using the cross-sectional area of the gutter on the graph in Figure 1, determine the catchment area per downpipe.
- Calculate (as a first test) the minimum number of downpipes required for the selected gutter using the equation:

\[
\text{Number of downpipes (min.)} = \frac{\text{Total catchment area of the roof}}{\text{Catchment area (determined in 6)}}
\]

Round the number of downpipes up to the next whole number.
- On the plan, select locations for the downpipes and the high points in the gutters. Where practical, the catchments for each downpipe should be about equal in area. When selecting the location of high points and downpipes, consideration should also be given to proximity to high concentrations of water flow (e.g. valley gutters, diversions around large roof penetrations, dormers, etc). More guidance is given in AS/NZS 3500.3:2003, HB114:1998 and BCA. Calculate the area of each catchment for each downpipe.
- With the area of your eaves gutter, check that the catchment area for each downpipe, calculated in Step 8, is equal to or less than the catchment area shown by the graph. If a catchment area is too big then you can:
  - Increase the number of downpipes;
  - Reposition the downpipes and/or the high points;
  - Choose a gutter with bigger effective cross-sectional area, then repeat the above from Step 6.
- Decide on the downpipe size. Recommendations in AS/NZS 3500.3:2003 on downpipe sizes. As an approximate guide, the area of round pipes should be equal to the area of the gutter, whilst the area of square or rectangular pipes may be 20% smaller (Table 2).
11. Consider measures to counter potential overflow of gutters into the building (see pages 2 and 3). Consideration of overflow at high concentrations of water flow may need to be given. Guidance on this matter is given in NSW Dept of Fair Trading bulletin FTB40 (January 2009).

Overflow capacity of slots in the LYSAGHT® gutters are provided in Table 3.

Table 6.2.2
LYSAGHT® gutter areas and downpipes.

<table>
<thead>
<tr>
<th>Slotted</th>
<th>Effective cross section</th>
<th>Round (diameter)</th>
<th>Rectangular or square</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes/no</td>
<td>mm²</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>Quad Hi-front</td>
<td>yes 5225 90 100x50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no 5809 90 100x50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quad Lo-front</td>
<td>no 6165 90 100x50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHEERLINE®</td>
<td>yes 7600 100 100x75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no 8370 $ 100x75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRIMLINE®</td>
<td>yes 6244 90 100x50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no 7800 100 100x75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150 Half Round</td>
<td>yes 4675 90 100x50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no 7042 100 100x75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150 Half Round Flat Back</td>
<td>yes 4602 90 100x50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no 6914 100 100x75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half Round 100</td>
<td>no 4300 75 100x50*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half Round 125</td>
<td>no 6300 90 100x50*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half Round 150</td>
<td>no 9200 $ 100x75*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half Round 200</td>
<td>no 14500 $ $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half Round 250</td>
<td>no 24500 $ $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half Round 300</td>
<td>no 35300 $ $</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# Values calculated in accordance with AS/NZS 2179.1:1994.
$ Non standard downpipe and nozzle/pop is required.
* Non standard nozzle/pop is required to suit rectangular downpipe.

SINGLE SLOPE ROOF

HIP OR GABLE ROOF

Eaves

Roof pitch

H = Roof width

Ridge

Figure 1
Cross-sectional area of eaves gutters required for various roof catchment areas (where gradient of gutter is 1:500 and steeper). (Adapted from AS 3500.3:2003).

Table 3
LYSAGHT® gutter slot overflow capability.

<table>
<thead>
<tr>
<th>Rainfall Intensity</th>
<th>Rigid-fix Catchment area</th>
<th>Domestic 22.5° pitched roof width “H”</th>
<th>Flexiblefix Catchment area</th>
<th>Domestic 22.5° pitched roof width “H”</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm/hr</td>
<td>m² perm run of gutter</td>
<td>m</td>
<td>m² perm run of gutter</td>
<td>m</td>
</tr>
<tr>
<td>100</td>
<td>8.3</td>
<td>6.9</td>
<td>14.3</td>
<td>11.9</td>
</tr>
<tr>
<td>150</td>
<td>5.5</td>
<td>4.6</td>
<td>9.5</td>
<td>7.9</td>
</tr>
<tr>
<td>200</td>
<td>4.2</td>
<td>3.4</td>
<td>7.1</td>
<td>5.9</td>
</tr>
<tr>
<td>250</td>
<td>3.3</td>
<td>2.8</td>
<td>5.7</td>
<td>4.7</td>
</tr>
<tr>
<td>300</td>
<td>2.8</td>
<td>2.3</td>
<td>4.8</td>
<td>4.0</td>
</tr>
<tr>
<td>350</td>
<td>2.4</td>
<td>2.0</td>
<td>4.1</td>
<td>3.4</td>
</tr>
<tr>
<td>400</td>
<td>2.1</td>
<td>1.7</td>
<td>3.6</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Notes:
1. Check with your local service centre for the availability of slots.
2. Slot overflow is based on test results.
3. The slot capacity is conservative and can be used for all gutters produced in NSW.
4. Flexible-fix refers to long straight runs of gutters. Rigid-fix refers to short length of gutters that are rigidly held in place by corners, downpipes, and the like.
# LYSAGHT® GUTTERS, FASCIA AND ACCESSORIES

## QUAD

**Hi-Front**

- **Profile shown unslotted for clarity.**

## QUAD

**Lo-Front**

- **Profile shown unslotted for clarity.**

## TRIMLINE®

- **Profile shown unslotted for clarity.**

## SHEERLINE®

- **Profile shown unslotted for clarity.**

## 150 HALF ROUND & FLAT BACK

- **Profile shown slotted.**
- **Profile shown slotted.**

## HALF ROUND (Bought in)

## NOVALINE® Fascia

- **Profile shown slotted.**
LYSAGHT® quality gutters and fascia are available in unpainted ZINCALUME® steel and in a range of COLORBOND® steel pre-painted colours to match or contrast your roof. All accessories shown below are manufactured with compatible materials. Visible accessories are available plain or coloured to match the gutter and fascia.

### ACCESSORIES

<table>
<thead>
<tr>
<th>Component</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal bracket</td>
<td>Plain</td>
</tr>
<tr>
<td>External bracket</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>Overstrap</td>
<td>ZINCALUME®</td>
</tr>
</tbody>
</table>

### ACCESSORIES

<table>
<thead>
<tr>
<th>Component</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal bracket</td>
<td>ZINCALUME®</td>
</tr>
<tr>
<td>Overstrap</td>
<td>Plain</td>
</tr>
<tr>
<td>A4 bracket</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>End stop (pair)</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>A4 bracket</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>A4 bracket</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>A4 bracket</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>A4 bracket</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>A4 bracket</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>A4 bracket</td>
<td>Plain &amp; coloured</td>
</tr>
</tbody>
</table>

**Large water carrying capacity for high rainfall areas and large roof sizes**

**Curved base provides improved self-cleaning and minimises build-up of water and dirt**

**A complete range of accessories are available**

**Flat Back gutter offers concealed fixing for clean and seamless finish**

**Available with optional slotting to allow overflow**

### ACCESSORIES

<table>
<thead>
<tr>
<th>Component</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring clip</td>
<td>Plain</td>
</tr>
<tr>
<td>Internal and external corner cap 90° &amp; 45°</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>Barge mould left and right</td>
<td>Plain &amp; coloured</td>
</tr>
<tr>
<td>Multipurpose bracket</td>
<td>Plain</td>
</tr>
</tbody>
</table>

**Perfect with Quad and TRIMLINE® gutters**

**NOVALINE® Fascia replaces traditional timber fascias which reduces painting and maintenance**

**NOVALINE® Fascia Cover can be used as a quick fix over existing timber fascia**

**Extensive range of accessories**
Finish your roof with the distinctive style of the LYSAGHT® downpipes and accessories. These downpipes and accessories are compatible with the NOVALINE® Fascia System, and with a wide range of gutters.

All LYSAGHT® downpipes and accessories are made from galvanised or ZINCALUME® steel, which means they are strong and made to last.

Most downpipes and accessories are available in unpainted ZINCALUME® steel and a range of COLORBOND® steel colours to match or contrast with your roof. They are compatible with steel and tile roofs.

A wide range of rectangular, square and round downpipes available to complement all building styles. Some dimensions and availability may vary slightly from region to region.

**DOWNPIPES**

- **Rectangular or square**
  - 100x60
  - 100x75
  - 100x100

- **Round**
  - 75
  - 90
  - 100

**DOWNPIPE ACCESSORIES**

- **Astragal/brackets**
- **Pops**
- **Unidrop**
- **Square corner**

- **Round corner**
- **Offsets**
TRADEWORK & FLASHINGS
Made to order to your specifications

Refer to the NSW price list for the full range of tradework and flashing products available. Ask your technical sales representative for details.

To order your rainwater head or other trade item, supply detailed drawings or template showing front and side elevations with dimensions and we can manufacture for you. Some standard shapes and dimensions are available. For the rainwater heads, the outlet holes and nozzles are not included.

The selection, design, sizing and overflow method should be specified by a suitably qualified trade or professional in accordance with BCA and Australian standards.

TRADEWORK

LYSAGHT® standard rainwater heads
390 W x 300 H x 250 D

Tapered rainwater heads
(downpipe outlet not included)
Small: 380 x 175 x 200 mm
Large: 450 x 250 x 250 mm
Or to your dimensioned drawing.

Custom made square rainwater heads
(downpipe outlet not included)
To your dimensioned drawing.

Custom made round rainwater heads
To your dimensioned drawing.

Corner OGEE® rainwater head
To your dimensioned drawing.

OGEE® rainwater head
Small: 310 x 200 mm
Large: 400 x 250 mm
Or to your dimensioned drawing.

Chinaman’s hat
Standard or made to order to your dimensioned drawing.
Sizes from 150-400mm.

Sump. tray
To your dimensioned drawing.

OVERFLOWS
To your dimensioned drawing.

SPREADERS
To your dimensioned drawing.

FLASHINGS

Ridge capping
Barge roll
Valley flashing

Roll top ridge capping
Apron flashing
Barge gutter

Barge capping
Tapered custom flashing
Box gutter custom flashing

MATERIALS FOR FLASHINGS

COLORBOND® steel
COLORBOND® Ultra steel
COLORBOND® Metallic steel
ZINCALUME® steel
Galvanised steel

OTHER PRODUCTS

Other rainwater system products are available. Refer to the NSW price book for full details.

NOVALINE® fascia cover
SHEERLINE® capping

MATERIALS FOR TRADEWORK

COLORBOND® steel
COLORBOND® Ultra steel
COLORBOND® Metallic steel
ZINCALUME® steel

GALVABOND® steel
Stainless steel 304-2B, 316-2B
Copper
INSTALLATION ADVICE
Get it right first time with LYSAGHT® products

BRACKET SPACING
When the gutters are attached to NOVALINE® fascia, then the gutter bracket spacing should mirror the spacing of the NOVALINE® brackets (i.e. 600mm & 1200mm), and the gutter brackets should be adjacent to the NOVALINE® brackets.

However, when the gutters are fixed to other fascias then the weight of the water carried by the gutter should determine spacing required - however spacing should not exceed 1200mm maximum.

FALL
Install gutters with a suitable fall to avoid ponding and to allow water to easily flow away. Steeper falls are preferred for prolonged life of the gutter. Refer to the BCA and the Australian Standards for guidance.

METAL & TIMBER COMPATIBILITY
Lead, copper, bare steel and green or some chemically-treated timber are not compatible with this product; thus don’t allow any contact of the product with those materials, nor discharge of rainwater from them onto the product. If there are doubts about the compatibility of other products being used, ask for advice from our information line.

ROOF DRAINAGE SYSTEM DESIGN
Roof drainage systems should be designed and detailed by a suitably qualified trade or professional in accordance with the BCA and the Australian Standards. Particular reference should be made to the correct sizing of gutter; quantity and placement of downpipes; and the provision of appropriate overflow devices. (Page 2-3).

ADVERSE CONDITIONS
If these products are to be used within 1km of marine, severe industrial, or unusually corrosive environments, ask for advice from our information line.

INSTALLATION ADVICE
The roof drainage system should be installed using good trade practices and by a certified installer.

For sealed joints use screws or rivets and neutral-cure silicone sealant branded as suitable for use with galvanised or COLORBOND®/ZINCALUME® steel.

CLEAN UP
Remove all plastic cover strips from product and dispose of correctly.

Sweep all metallic swarf and other debris from roof areas, gutters, downpipes, overflow devices and all other roof drainage components, at the end of each day and at the completion of the installation.

GUTTER MAINTENANCE
The roof drainage system (gutter, downpipes, overflow devices and all other components) must be cleaned out on a regular basis.
GUTTER MAINTENANCE
Getting the most from LYSAGHT® products

1) A typical suburban gutter clogged with leaf litter prior to cleaning.

2) Wear correct protection when cleaning leaves and twigs.

3) When litter is removed, the layer of hardened dirt is revealed below.

4) Rinse the gutter with water to soften and break up the dirt.

5) Use a soft bristle brush and sweep the dirt out. Rinse again.

6) When the gutter has been cleaned, it should look like this.

CLEANING GUTTERS
Twigs, dust, leaves and fungal matter (debris) should be removed regularly from gutters - as failure to do so voids your warranty.

- Sweep debris into a pile using a stiff, soft bristled brush (shovels or hard tools should not be used).
- The whole roof and gutter should then be washed down with a hose, including high ends of gutters (possibly protected by overhangs), rain heads, water spouts and overflow locations.

A well maintained gutter/downpipe will make your rainwater system provide years and years of trouble-free service.
PRODUCT DESCRIPITIONS

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