System Guide

The Golden Rules for installing **Plygene® Gutterline** and guarantee request for Trained Contractors

sharmans plygene® gutterline

08/05/2017

Seamlessly improving gutter performance

The Plygene® Gutterline system

Plygene® Gutterline is the only BBA approved gutter lining system designed to restore and preserve gutter performance.

Following its pioneering launch 30 years ago, it has been continuously engineered to meet the exacting demands of the UK's gutters.

Installed by Sharman's qualified Trained Contractor Network, the bespoke system is purpose designed to provide a seamless, non-bonded "gutter within a gutter" that provides a full 25 year system guarantee when fixed in accordance with the Installation Training Programme.

Guide contents

The system is made up of **four key elements**:

Liner

A thermoplastic, durable, hard-wearing and flexible liner that is bespoke creased to the profile of the existing gutter.

Fixing

Fixing specifications for mechanically trapping and pinning the liner and all of the system components. These include gutter stop ends, flashings, galvanised angles and a specific range of fixings for each different type of gutter substrate.

Drainage

There are many types, shapes and sizes of outlets for rainwater drainage. Sharman's system supports them all, including gravity systems, syphonic, vortex, weir and emergency overflow to name just a few, along with other drainage components such as leaf guards.

Network components

A roof's gutter network will include transition components to link sections of the gutter system including T-junctions, corners and other bespoke elements. Over 30 years, we have seen them all and we have developed our manufacturing capability to produce bespoke moulded network components to any size or shape to match the existing building.

Survey and technical support

The Sharman's Technical Support team offers a national network of Technical Services Managers as well as a dedicated head office technical helpline.

The team has in depth system knowledge combined with a wealth of practical hands-on experience to offer advice and support at all stages of the design and installation process from initial site survey through to specification generation and on-site installation.

Contact the Technical Support team: 01298 875007

Installation videos

The Sharman's web site includes a comprehensive range of short videos for each of the installation Golden Rules that must be followed to secure the system's guarantee.

Go to www.hdsharman.co.uk/videos

Technical support

Sharmans provides a comprehensive range of technical support material including:

- Material safety data sheets
- Maintenance guides
- BBA certification
- Health and safety information
- The 12 Golden Rules for installation guide
- Product warranties

These can be found on the contractor support tools web page, go to: www.hdsharman.co.uk/technical

Installation Golden Rules

Sharmans is committed to quality, not just of our system but its installation too.

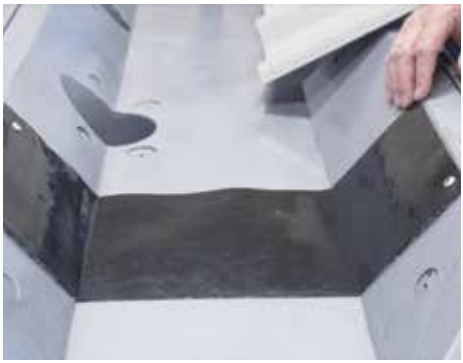
Summarised in this guide are the installation Golden Rules that must be followed and certified by a Trained Contractor in order to request the system guarantee from our Technical Services team.

To assess contractor performance Sharmans reserves the right to audit and inspect all installations, on a planned or random basis, as part of its ongoing quality assurance programme to improve standards across the roofing industry in line with the key objectives of the NFRC.

Rule 1

Preparation

First remove any existing debris or standing water and then crop and smooth all protruding bolt threads with an angle grinder or equivalent to provide a smooth surface. Fix Sharman's fleece backed protection strips over the cropped bolt heads using the specified fixings. Protruding bolts will damage the design integrity of the liner and negate its performance.



Rule 2

Pin outer thimbles

Mechanically pin all standard outer thimbles to the sole of the gutter with the Sharman's specified fixings provided. Non-pinned outlet thimbles will rise from the outlet allowing water ingress behind the liner.

Rule 3

Envelope fold the stop ends

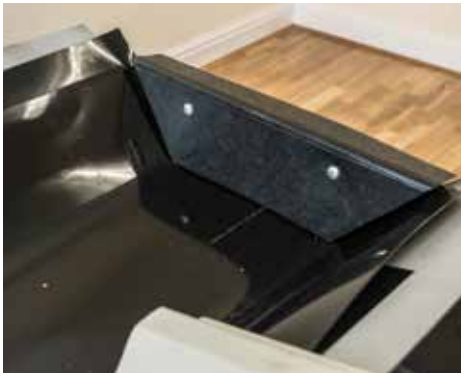
Fold the liner to the full height of the stop end.

It is not possible to "envelope fold" the liner to the stop end if it is cut short.

Rule 4

Angle Blanks

Cut the Angle Blank to the profile of the gutter and mechanically fix to the stop ends using the Sharman's specified fixings supplied. The Angle Blank is an integral part of the system design to prevent water ingress.



Rule 5

Always use the proprietary cutting tool

Use the proprietary hole cutting tool to ensure stress-free outlet profiles in the liner.

Any star cutting will cause stressing or ripping of the liner and potential water ingress.

Rule 6

Insert split thimbles at 45 degrees

Squeeze and insert standard split thimbles at 45 degrees to the centre of the outlet allowing it to fully open preventing any stress cuts to the liner.

Rule 7

Ensure the liner is pressed firmly along the crease lines

Physically press the liner into the angle of the gutter to make sure there's no gap between them prior to pinning. Forming the liner into the crease prevents air pockets and provides a secure base to weld the bespoke moulded unit to.

Rule 8

Mechanically pin the liner around the outlets

Mechanically pin the liner around all outlets, side boxes, sump boxes, corners, tees and transitions with the specified Sharman's fixings provided.

Pinning the liner provides a secure fixing location for the bespoke moulded units and is a key aspect of the system design.

Rule 9

All welds must be free from moisture

Weldable areas must be fully dried and made free from moisture prior to positioning and hot air welding of the bespoke moulded unit. Trapped moisture weakens the weld leading to delamination and water ingress.

Rule 10

Trap or fix the liner

Securely trap or fix all liners along the full length behind the specified new or existing flashings. If the liner is not fixed or securely trapped it will move over time allowing water ingress behind the system.

Rule 11

Trap or fix the wind uplift restraints

Position wind uplift restraints in line with the system's specification guidelines and ensure they are securely trapped under the roof sheets or mechanically twin pinned behind the new or existing flashings using the Sharman's specified fixings provided.

Wind uplift restraints are a key design feature to prevent wind uplift and must be positioned as detailed in the project specification.

Rule 12

Probe test all welds

Fully probe test all bespoke moulded units after the hot air weld has cooled to test their fixing integrity.

Air gaps and non-welded areas will allow water ingress between the liner and bespoke moulded unit.

Sharman's Trained Contractor

The lead fitter must be an assessed Sharman's Trained Contractor and current badge holder.

sharmans
trained
contractor


skanska

Guarantee request - self certification

Project name _____

Project address _____

Sharman's order number _____ Date of installation _____

Name _____
(assessed Trained Contractor and current badge holder)

Company name _____

Contact number _____

YES NO

☐ ☐ ☐ N/A

Rule 1: Preparation
Have all bolt threads been cropped and smoothed using an angle grinder or equivalent to provide a smooth surface and have Sharman's fleece backed protection strips been fitted using the specified fixings?

☐ ☐ ☐ N/A

Rule 2: Pin outer thimbles
Have all standard outer thimbles been mechanically pinned to the sole using the Sharman's specified fixings provided?

☐ ☐

Rule 3: Envelope fold the stop ends
Has the liner been folded to the full height of the stop end?

☐ ☐

Rule 4: Angle Blanks
Has the Angle Blank been cut to the profile of the gutter and mechanically fixed to the stop ends using the specified fixings supplied?

☐ ☐ ☐ N/A If moulded

Rule 5: Always use the proprietary cutting tool
Has the proprietary hole cutting tool been used to form stress-free outlet profiles in the liner?

☐ ☐ ☐ N/A If moulded

Rule 6: Insert split thimbles at 45 degrees
Have all standard split thimbles been squeezed and inserted at 45 degrees to prevent stress cuts to the liner?

☐ ☐

Rule 7: Ensure the liner is pressed firmly along the crease lines
Has the liner been physically pressed along the crease lines into the angle of the gutter to make sure there is no gap between the liner and gutter prior to pinning?

YES NO

☐ ☐

Rule 8: Mechanically pin the liner around the outlets
Has the liner been mechanically pinned around all outlets, side boxes, sumps, corners, tees and transitions using the specified fixings provided?

☐ ☐ ☐ N/A If standard

Rule 9: All welds must be free from moisture
Have all weldable areas been fully dried and made free from moisture prior to positioning and welding of the bespoke moulded unit?

☐ ☐

Rule 10: Trap or fix the liner
Are all liners securely trapped or fixed along the full length noting that they must be fixed behind the new or existing flashings?

☐ ☐

Rule 11: Trap or fix the wind uplift restraints
Have wind uplift restraints been positioned in accordance with Sharman's guidelines and securely trapped under the roof sheets or twin pinned behind the new or existing flashings using the Sharman's specified fixings provided?

☐ ☐ ☐ N/A If standard

Rule 12: Probe test all welds
Have all welds been fully probe tested after the hot air weld has cooled?

Note:
Sharmans reserves the right to audit and inspect all installations on a planned or random basis as part of its ongoing quality assurance programme to improve standards across the roofing industry in line with the key objectives of the NFRC.

Complete and return this form to Sharmans by post, fax or email to:
F. 01298 812237 **E.** info@hdsharman.co.uk
or complete it online at **www.hdsharman.co.uk**

Sales support

A comprehensive range of sales support information and materials for Sharmans can be found on the Sharman's web site, go to: www.hdsharman.co.uk.

These include:

- BBA certification
- Data sheets and technical documents
- Dilapidation and condition support and reports
- Material and system samples
- Site surveys
- Installation and training

Under our Project Flow support mechanism for large or complex projects, Sharmans offers full service contractor support at each stage of the process and where appropriate can include pre-sales support, joint presentations and tender support. We are here to help with site survey, condition reporting, specification generation, on-site installation support and guarantee certification.

HD Sharman Ltd.
High Peak Works
Chapel-en-le-Frith
High Peak, Derbyshire
SK23 0HW

T. 01298 812371
F. 01298 812237
E. info@hdsharman.co.uk
W. hdsharman.co.uk

sharmans
the gutter lining experts