## **Alumasc Exterior Building Products Ltd**

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Agrément Certificate 86/1671 Product Sheet 3

# ALUMASC RAINWATER SYSTEMS

# ALUMASC GX JOGGLE, SMOOTH, MOULDED GUTTER SYSTEMS

## PRODUCT SCOPE AND SUMMARY OF CERTIFICATE

This Certificate relates to Alumasc GX Joggle, Smooth, Moulded Gutter Systems, for use as eaves guttering for conveying rainwater from roofs.

#### AGRÉMENT CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.

#### KEY FACTORS ASSESSED

**Performance of joints** — joints between gutter sections and fittings are watertight under conditions of thermal movement in excess of those expected to occur in practice (see section 5).

**Resistance to loading** — gutters have adequate resistance to snow loading (see section 6).

**Durability** — the systems will have a life expectancy of 40 years in rural and suburban conditions and 25 years in industrial and coastal conditions (see section 9).

The BBA has awarded this Agrément Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

BCChamlichein

In Gener

Greg Cooper Chief Executive

Date of First issue: 14 March 2011 Originally certificated on 28 November 1988 Brian Chamberlain Head of Approvals — Engineering

The BBA is a UKAS accredited certification body — Number 113. The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

Readers are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.

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# Regulations

In the opinion of the BBA, Alumasc GX Joggle, Smooth, Moulded Gutter Systems, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements of the following Building Regulations:



Regul Comr Regul Comr

## The Building Regulations 2010 (England and Wales)

S.		
Requirement:	H3	Rainwater drainage
Comment:		See sections 3, 5, 6 and 7 of this Certificate.
Requirement:	Regulation 7	Materials and workmanship
Comment:		The systems are acceptable. See section 9 and the Installation part of this Certificate.
The	e Building (S	cotland) Regulations 2004 (as amended)
Regulation:	8(1)(2)	Fitness and durability of materials and workmanship
Comment:		The systems can contribute to a construction satisfying this Regulation. See sections 8.1, 8.2 and 9 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards – construction
Standard:	3.6	Surface water drainage
Comment:		The products meet the relevant requirements of this Standard. See sections 3, 5, 6 and 7 of this Certificate.
The state	e Building Re	egulations (Northern Ireland) 2000 (as amended)
Regulation:	B2	Fitness of materials and workmanship
Comment:		The systems are acceptable. See section 9 and the Installation part of this Certificate.

ment:		The systems are acceptable. See section 9 and the <i>installation</i> part of this Certifi
lation:	B3(2)	Suitability of certain materials
ment:		The systems are acceptable. See sections 8.1 and 8.2 of this Certificate.
lation:	N5	Rain-water drainage
ment <sup>.</sup>		See sections 3 5 6 and 7 of this Certificate

## Construction (Design and Management) Regulations 2007

## Construction (Design and Management) Regulations (Northern Ireland) 2007

In the opinion of the BBA, there is no information in this Certificate which relates to the obligations of the client, CDM co-ordinator, designer and contractors under these Regulations.

# Non-regulatory Information

## NHBC Standards 2011

NHBC accepts the use of Alumasc GX Joggle, Smooth, Moulded Gutter Systems, when installed and used in accordance with this Certificate, in relation to *NHBC Standards*, Part 7 *Roofs* (Chapters 7.1 – D9 and 7.2 – D15).

# General

This Certificate relates to Alumasc GX Joggle, Smooth, Moulded Gutter Systems for use as eaves guttering for conveying rainwater from roofs.

The systems can be installed easily and joints will be watertight. They have adequate resistance to impacts and other loads likely to occur during installation and service.

Systems designed and installed in accordance with BS EN 12056-3 : 2000 will have a satisfactory flow capacity.

The items described in this Certificate are marketed by Alumasc Exterior Building Products Ltd.

In the opinion of the British Board of Agrément, the products are suitable for their purpose.

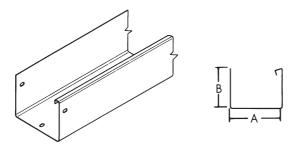
# Technical Specification

# 1 Description

1.1 Alumasc GX Regular, Smooth, Moulded Gutter Systems are available in a range of sizes and comprise the items listed in Tables 1 and 2.

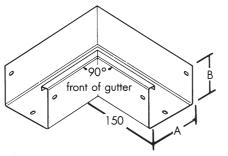
# Table 1 Pressed aluminium box gutters and fittings

Standard gutter lengths					
Reference	Length (mm)	A (mm)	B (mm)		
GX Joggle					
GXJ1/3MA	3000	102	76		
GXJ2/3MA	3000	127	102		
GXJ3/3MA	3000	152	102		
GXJ4/3MA	3000	152	152		
GXJ5/3MA	3000	204	152		
GX Smooth					
GXS1/3MA	3000	122	76		
GXS2/3MA	3000	141	99		
GXS3/3MA	3000	171	125		
GXS4/3MA	3000	177	152		
GXS5/3MA	3000	225	150		
GX Moulded					
GXM1/3MA	3000	113	76		
GXM2/3MA	3000	139	102		
GXM3/3MA	3000	162	102		
GXM4/3MA	3000	175	152		
GXM5/3MA	3000	207	152		

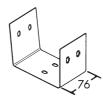


### 90° angles

Referen	се	А	В	
External	Internal	(mm)	(mm)	
GX Joggle				
GXJ1/EA90A	GXR1/IA90A	102	76	
GXJ2/EA90A	GXR2/IA90A	127	102	
GXJ3/EA90A	GXR3/IA90A	152	102	
GXJ4/EA90A	GXR4/IA90A	152	152	
GXJ5/EA90A	GXR5/IA90A	204	152	
GX Smooth				
GXS1/EA90A	GXS1/IA90A	102	76	
GXS2/EA90A	GXS2/IA90A	141	99	
GXS3/EA90A	GXS3/IA90A	171	125	
GXS4/EA90A	GXS4/IA90A	177	152	
GXS5/EA90A	GXS5/IA90A	225	150	
GX Moulded				
GXM1/EA90A	GXM1/IA90A	113	76	
GXM2/EA90A	GXM2/IA90A	139	102	
GXM3/EA90A	GXM3/IA90A	162	102	
GXM4/EA90A	GXM4/IA90A	175	152	
GXM5/EA90A	GXM5/IA90A	207	152	
		-		



Union clips			
Reference	A (mm)	B (mm)	
GX Joggle None required None required None required None required None required			
GX Smooth GXS1/UCA GXS2/UCA GXS3/UCA GXS4/UCA GXS5/UCA	122 141 171 177 225	76 99 125 152 150	
GX Moulded GXM1/UCA GXM2/UCA GXM3/UCA GXM4/UCA GXM4/UCA	113 139 162 175 207	76 102 102 152 152	



### 135° angle

Reference	ce	А	В
External	Internal	(mm)	(mm)
GX Joggle			
GXJ1/EA135A GXJ2/EA135A GXJ3/EA135A GXJ4/EA135A GXJ4/EA135A GXJ5/EA135A	GXR1/IA135A GXR2/IA135A GXR3/IA135A GXR4/IA135A GXR5/IA135A	102 127 152 152 204	76 102 102 152 152
GX Smooth GXS1/EA135A GXS2/EA135A GXS3/EA135A GXS4/EA135A GXS5/EA135A	GXS1/IA135A GXS2/IA135A GXS3/IA135A GXS4/IA135A GXS5/IA135A	122 141 171 177 225	76 99 125 152 150
<b>GX Moulded</b> GXM1/EA135A GXM2/EA135A GXM3/EA135A GXM4/EA135A GXM5/EA135A	GXM1/IA135A GXM2/IA135A GXM3/IA135A GXM4/IA135A GXM5/IA135A	113 139 162 175 207	76 102 102 152 152

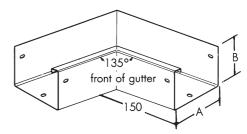
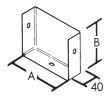


Table 1	Pressed	aluminium	box	gutters	and	fittings	(continued)	)
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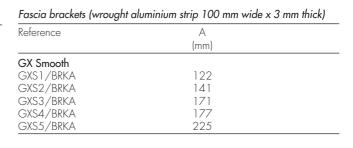
Stop ends				
Reference		А	В	
		(mm)	(mm)	
GX Joggle				
GXJ1/SEA		98	72	
GXJ2/SEA		123	98	
GXJ3/SEA		148	98	
GXJ4/SEA		148	148	
GXJ5/SEA		200	148	
GX Smooth				
GXS1/SELA	GXS1/SERA	122	76	
GXS2/SELA	GXS2/SERA	141	99	
GXS3/SELA	GXS3/SERA	171	125	
GXS4/SELA	GXS4/SERA	177	152	
GXS5/SELA	GXS5/SERA	225	150	
GX Moulded				
GXM1/SELA	GXM1/SERA	113	76	
GXM2/SELA	GXM2/SERA	139	102	
GXM3/SELA	GXM3/SERA	162	102	
GXM4/SELA	GXM4/SERA	175	152	
GXM5/SELA	GXM5/SERA	207	152	

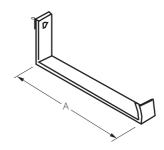


Note: all dimensions in millimetres

Table 2 Outlets, downpipes and brackets

Outlets and square/rectangular downpipes						
Reference	A (mm)	B (mm)	C (mm)	X (mm)	Y (mm)	
GXJ1/SO33A GXJ2/SO33A GXJ3/SO33A GXJ4/SO33A GXJ5/SO33A	113 139 162 175 207	76 102 102 152 152	51 64 76 76 102	72 72 72 72 72 72	72 72 72 72 72 72	
GXJ1/SO43A GXJ2/SO43A GXJ3/SO43A GXJ4/SO43A GXJ5/SO43A	113 139 162 175 207	76 102 102 152 152	51 64 76 76 102	102 102 102 102 102	76 76 76 76 76	
GXJ1/SO44A GXJ2/SO44A GXJ3/SO44A GXJ4/SO44A GXJ5/SO44A	113 139 162 175 207	76 102 102 152 152	51 64 76 76 102	102 102 102 102 102	102 102 102 102 102	





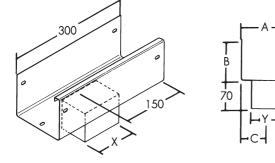
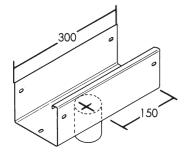
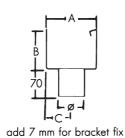


Table 2 Outlets, downpipes and brad	ckets (continued)
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Outlets and circul				
Reference	Diameter	A	B (mm)	C
	(mm)	(mm)	(11111)	(mm)
<b>GX Joggle</b> GXJ1/RO25A GXJ2/RO25A GXJ3/RO25A GXJ4/RO25A	63 63 63 63	102 127 152 152	76 102 102 152	51 64 76 76
GXJ5/RO25A	63	204	152	102
GXJ1/RO30A GXJ2/RO30A GXJ3/RO30A GXJ4/RO30A GXJ5/RO30A	75 75 75 75 75 75	102 127 152 152 204	76 102 102 152 152	51 64 76 76 102
GXJ1/RO40A GXJ2/RO40A GXJ3/RO40A GXJ4/RO40A GXJ5/RO40A	100 100 100 100 100	102 127 152 152 204	76 102 102 152 152	51 64 76 76 102
GX Smooth GXS1/RO25A GXS2/RO25A GXS3/RO25A GXS4/RO25A GXS5/RO25A	63 63 63 63 63	122 141 171 177 225	76 99 125 152 150	51 64 76 76 102
GXS1/RO30A GXS2/RO30A GXS3/RO30A GXS4/RO30A GXS5/RO30A	75 75 75 75 75	122 141 171 177 225	76 99 125 152 150	51 64 76 76 102
GXS1/RO40A GXS2/RO40A GXS3/RO40A GXS4/RO40A GXS5/RO40A	100 100 100 100 100	122 141 171 1 <i>77</i> 225	76 99 125 152 150	51 64 76 76 102
<b>GX Moulded</b> GXM1/RO25A GXM2/RO25A GXM3/RO25A GXM4/RO25A GXM5/RO25A	63 63 63 63 63	113 139 162 175 207	76 102 102 152 152	51 64 76 76 102
GXM1/RO30A GXM2/RO30A GXM3/RO30A GXM4/RO30A GXM5/RO30A	75 75 75 75 75	113 139 162 175 207	76 102 102 152 152	51 64 76 76 102
GXM1/RO40A GXM2/RO40A GXM3/RO40A GXM4/RO40A GXM5/RO40A	100 100 100 100 100	113 139 162 175 207	76 102 102 152 152	51 64 76 76 102





 Standard pipe lengths (including sockets)

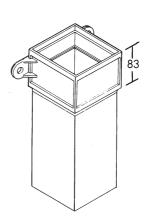
 Effective
 72 x 72
 102 x 76
 102 x 102

 length
 (mm)
 (mm)
 (mm)

 3000
 RW33/3M
 RW43/3M
 RW44/3M

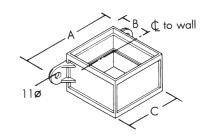
 2000
 RW33/2M
 RW43/2M
 RW44/2M

 1000
 RW33/1M
 RW43/1M
 RW44/1M



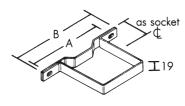
#### Pipe sockets

Reference	А	В	С	
	(mm)	(mm)	(mm)	
RVV33/PS	162	52	912	
RVV43/PS	191	54	121	
RVV44/PS	191	67	121	



Pipe clips (wrought aluminium	sections	30	mm	х З	mm	with	4	mm
extruded base)								

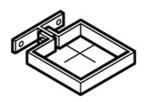
Reference	A (mm)	B (mm)	C (mm)	
RW33/PC	130	160	52	
RVV43/PC RVV44/PC	160 160	190 190	54 67	



Outlets, downpipes and brackets (continued) Table 2

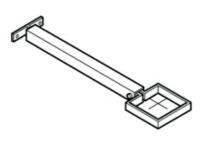
Pipe clips with small base bracket (wrought aluminium	sections
30 mm x 3 mm with 4 mm extruded base)	

Reference	А	В	С	
	(mm)	(mm)	(mm)	
RW33/SB/PC	78	47	78	
RW43/SB/PC	80	47	80	
RW44/SB/PC	93	47	94	

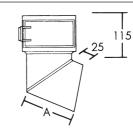


**Pipe clips with extension base** (wrought aluminium sections 30 mm x 3 mm with 4 mm fabricated base)

Reference	A (mm)	
RVV33/EX/PC RVV43/EX/PC RVV44/EX/PC	87 min to 290 max 89 min to 292 max 102 min to 305 max	

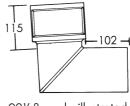


#### Shoes Pipe size (mm) В Reference А (mm) (mm) RW33/SH RW43/SH RW44/SH 72 x 72 102 x 76 102 x 102 82 83 82 106 106 148



#### Bends

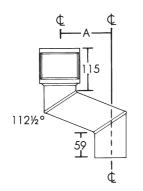
Bends					
Reference	Pipe size (mm)	A (mm)	B (mm)	C (mm)	Hand
RW33/B/92R	72 x 72	82	67	137	right
RW33/B/112R	72 x 72	82	57	127	right
RW33/B/135R	72 x 72	82	47	117	right
RVV43/B/92R	102 x 76	82	80	150	right
RVV43/B/112R	102 x 76	82	66	136	right
RVV43/B/135R	102 x 76	82	58	128	right
RW44/B/92R	102 x 102	82	81	151	right
RW44/B/112R	102 x 102	82	66	136	right
RW44/B/135R	102 x 102	82	53	123	right
RW33/B/92L	72 x 72	82	67	137	left
RW33/B/112L	72 x 72	82	57	127	left
RW33/B/135L	72 x 72	82	47	117	left
RW43/B/92L	102 x 76	82	80	150	left
RW43/B/112L	102 x 76	82	66	136	left
RW43/B/135L	102 x 76	82	58	128	left
RW44/B/92L	102 x 102	82	81	151	left
RW44/B/112L	102 x 102	82	66	136	left
RW44/B/135L	102 x 102	82	53	123	left



921/2° angle illustrated

#### Offsets

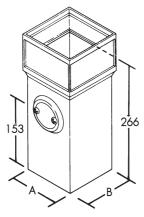
Reference	A	В	С	
	(mm)	(mm)	(mm)	
Pipe 72 mm x 72 mm				
RW33/PO/3 one-part	82	220	76	
RW33/AO/12 two-part	82	310	305	
RW33/AO/21 two-part	82	390	533	
RW33/AO/30 two-part	82	470	762	
Pipe 102 mm x 76 mm				
RW43/PO/3 one-part	82	220	76	
RW43/AO/12 two-part	82	310	305	
RW43/AO/21 two-part	82	390	533	
RW43/AO/30 two-part	82	470	762	
Pipe 102 mm x 102 mm				
RW44/PO/3 one-part	82	220	76	
RW44/AO/12 two-part	82	310	305	
RW44/AO/21 two-part	82	390	533	
RW44/AO/30 two-part	82	470	762	



# Table 2 Outlets, downpipes and brackets (continued)

### Access pipes

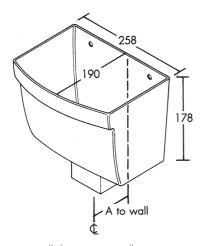
Reference	Pipe size	A	В	С
	(mm)	(mm)	(mm)	(mm)
RW33/ACP	72 x 72	82	266	153
RW43/ACP RW44/ACP	102 x 76 102 x 102	82 82	266 266	153 153



all dimensions in millimetres

#### Rectangular rain-water heads

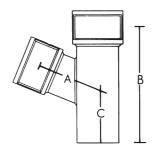
-					
Reference	Pipe size	$\mathbb{W}$	Р	Н	
	(mm)	(mm)	(mm)	(mm)	
RW33/RH	72 x 72	258	190	178	
RW43/RH	102 x 76	258	190	178	
RVV44/RH	102 x 102	258	190	178	



all dimensions in millimetres

#### Branches

Reference	Pipe size	А	В	С	
	(mm)	(mm)	(mm)	(mm)	
RW33/BR/92	72 x 72	82	230	85	
RW43/BR/112	72 x 72	82	248	118	
RW44/BR/135	72 x 72	82	310	190	



1.2 Outlets, downpipes and fittings are available in the sections and sizes given in Table 3.

Table 3 Available sizes	
Square and	Circular — nominal
rectangular section	diameter
(mm)	(mm)
72 x 72	63
102 x 76	75
102 x 102	100
	150

1.3 All components are of aluminium (see Table 4) and are available mill finished or polyester coated. The gutter lengths and the fittings are produced by shearing, bending and welding sheet aluminium. Some fittings, eg angles and outlets, have continuous seam welds.

Table 4         Specifications of aluminium components				
Component	Type of aluminium	Standard		
Gutter lengths, fittings an washers	nd 1200	BS EN 485, BS EN 515, BS EN 573, BS EN 612, BS EN 1462		
Downpipes	6063 T6	BS EN 573, BS EN 755, BS EN 12020		
Downpipe fittings	LM2, LM6	BS 8530		
Screws	5251	BS EN 1301		

1.4 Downpipes are extruded and are bought in to the required specification. Downpipe fittings are cast and extruded screws, nuts, washers and other accessories are bought in to the required specification and supplied as required.

1.5 The gutter sections are butt jointed and overlapped by a 76 mm wide internal or external union clip. A gap 4 mm wide is left between each section. Slots may be provided for fixing with screws, nuts and washers. Each joint is sealed using a suitable silicone sealant<sup>(1)</sup>.

(1) External union clips are available on request.

1.6 Brackets and top straps are formed from wrought or pressed aluminium.

1.7 Continuous quality control is exercised during manufacture, including visual and dimensional checks, chemical analysis on the molten material for casting of downpipe fittings and accessories, and on off-cuts of bought-in sheet material and downpipe.

# 2 Delivery to site

2.1 Mill finished gutters, downpipes and fittings are delivered to site unprotected and coated components are wrapped in polythene. Reasonable care should be taken to avoid damage during storage, handling and installation.

2.2 In accordance with normal good practice, the components should be stored under cover and away from the risk of impact and the effects of the weather.

2.3 Each component bears the manufacturer's name. The packaging bears the BBA identification mark incorporating the number of this Certificate.

# **Design Considerations**

## 3 General



Alumasc GX Joggle, Smooth, Moulded Gutter Systems are suitable for use as eaves guttering for conveying rainwater from roofs.

# 4 Practicability of installation

The systems are designed to be installed by a competent general builder, or a contractor, experienced with this type of system.

## 5 Performance of joints



Correctly-made joints between adjacent gutter sections and between gutter sections and fittings are watertight under conditions of thermal movement in excess of those expected to occur in practice.

# 6 Resistance to loading



The systems have resistance to impacts and snow, water and other loads in excess of those likely to occur during and after installation.

# 7 Flow characteristics



The flow capacities, when calculated in accordance with BS EN 12056-3 : 2000, are given in Table 5.

Table 5 Freeflow capacitie	S <sup>(1)</sup>
Box gutter	Flow capacity (I.s <sup>-1</sup> )
100 x 75 mm (4" x 3")	2.18
125 × 100 mm (5″ × 4″)	4.28
150 x 100 mm (6" x 4")	5.16

(1) The flow capacity of downpipes can be found from BS EN 12056-3 : 2000, Table 8.

## 8 Maintenance

8.1 The system can be supplied uncoated or painted as required.

5 8.2 The gutters can be cleared easily of debris.

# 9 Durability

In the opinion of the BBA, the gutter system will have a minimum maintenance-free life of 40 years in rural and suburban conditions and 25 years in industrial and coastal conditions. However, when in contact with some materials corrosion may occur (see sections 10.2 and 10.3).

# nstallation

# 10 General

10.1 Installation must be carried out in accordance with the manufacturer's instructions and BS EN 12056-3 : 2000 where applicable.

10.2 The product will be corroded by contact with copper or water run-off from copper in any environment. It should not be installed on a building with a copper roof and other contacts with copper and its alloys should be avoided.

10.3 The contact areas should be coated with bitumen paint if the product is to be:

- embedded in concrete or mortar, or
- in contact with lead or stainless steel in a marine environment.

# 11 Procedure

11.1 The rafter and fascia bracket supports for the gutters should be fitted using No 12 by 38 mm zinc plated, cadmium plated or sherardized screws as detailed in Table 6.

Table 6	Details of screws	
System	Screw head type	Centres (maximum) (mm)
GX Joggle GX Smooth	roundhead roundhead	1000 1000
GX Moulded	roundhead	600

11.2 To make the joint watertight, sufficient suitable silicone sealant (eg Dow Corning 791) should be applied between the spigot or union clip, onto clean and dry surfaces, so that some of the sealant is squeezed out of the joint as the pieces are brought together. The excess sealant should be removed and the surrounding area cleaned. Nuts and bolts should be bedded in sealant (the head covered but the nut visible).

11.3 The aluminium screws, nuts and washers are fitted using the overlapping slots in the gutter lengths and the union clips; overtightening should be avoided.

11.4 If the gutter has to be trimmed to length, it can be cut with normal metalworking tools. Slots must then be formed to match the socket to which the gutter is to be fixed.

11.5 Circular downpipes are supplied with loose drive-fit sockets; square and rectangular cross-section downpipes have welded sockets. If a watertight joint is required, sealant should be applied to the lower part of the socket, and the pipe pushed home. The pipe socket should then be packed with suitable caulking, eg polyethylene foam, and a small bead of sealant introduced at the top of the joint.

11.6 Two-part square and rectangular section offsets are available which can be cut to the required length on site. Minimum projections are:

- 105 mm (72 mm by 72 mm and 107 mm by 76 mm offsets)
- 125 mm (102 mm by 102 mm offsets).

Technical Investigations

## 12 Tests

12.1 Tests were carried out to determine:

- resistance of brackets to 200 kg load
- resistance of gutter to loading.

12.2 An examination was made of data in relation to:

- dimensional accuracy
- watertightness of joints
- flow capacity
- resistance to impact
- ease of cleaning
- thermal movement.

## **13** Investigations

13.1 The manufacturing process was examined, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

13.2 Site visits were carried out to assess the practicability of installation and the performance in use.

# Bibliography

BS 8530 : 2010 Traditional — Style half round, beaded half round, Victorian ogee and moulded ogee aluminium rainwater systems — Specification

BS EN 485-1 : 2008 Aluminium and aluminium alloys — Sheet, strip and plate — Technical conditions for inspection and delivery

BS EN 485-2 : 2008 Aluminium and aluminium alloys — Sheet, strip and plate — Mechanical properties

BS EN 485-3 : 2003 Aluminium and aluminium alloys — Sheet, strip and plate — Tolerances on dimensions and form for hot-rolled products

BS EN 485-4 : 1994 Aluminium and aluminium alloys — Sheet, strip and plate — Tolerances on shape and dimensions for cold-rolled products

BS EN 515 : 1993 Aluminium and aluminium alloys - Wrought products - Temper designations

BS EN 573-1 : 2004 Aluminium and aluminium alloys — Chemical composition and form of wrought products — Numerical designation system

BS EN 573-2 : 1995 Aluminium and aluminium alloys — Chemical composition and form of wrought products — Chemical symbol based designation system

BS EN 573-3 : 2009 Aluminium and aluminium alloys – Chemical composition and form of wrought products – Chemical composition and form of products

BS EN 573-4 : 2004 Aluminium and aluminium alloys — Chemical composition and form of wrought products — Forms of products

BS EN 612 : 2005 Eaves gutters with bead stiffened fronts and rainwater pipes with seamed joints made of metal sheets

BS EN 755-1 : 2008 Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Technical conditions for inspection and delivery

BS EN 755-2 : 2008 Alúminium and aluminium alloys — Extruded rod/bar, tube and profiles — Mechanical properties

BS EN 755-3 : 2008 Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Round bars, tolerances on dimensions and form

BS EN 755-7 : 2008 Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Seamless tubes, tolerances on dimensions and form

BS EN 1301-1 : 2008 Aluminium and aluminium alloys - Drawn wire — Technical conditions for inspection and delivery

BS EN 1301-2 : 2008 Aluminium and aluminium alloys — Drawn wire — Mechanical properties

BS EN 1301-3 : 2008 Aluminium and aluminium alloys – Drawn wire – Tolerances on dimensions

BS EN 1462 : 2004 Brackets for eaves gutters – Requirements and testing

BS EN 12020-1 : 2001 Aluminium and aluminium alloys — Extruded precision profiles in alloys EN AW-6060 and EN AW-6063 — Technical conditions for inspection and delivery

BS EN 12020-2 : 2001 Aluminium and aluminium alloys — Extruded precision profiles in alloys EN AW-6060 and EN AW-6063 — Tolerances on dimensions and form

BS EN 12056-3 : 2000 Gravity Drainage Systems inside Buildings – Roof drainage, layout and calculation

# 14 Conditions

- 14.1 This Certificate:
- relates only to the product/system that is named and described on the front page
- is granted only to the company, firm or person named on the front page no other company, firm or person may hold or claim any entitlement to this Certificate
- is valid only within the UK
- has to be read, considered and used as a whole document it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English law.

14.2 Publications and documents referred to in this Certificate are those that the BBA deems to be relevant at the date of issue or re-issue of this Certificate and include any: Act of Parliament; Statutory Instrument; Directive; Regulation; British, European or International Standard; Code of Practice; manufacturers' instructions; or any other publication or document similar or related to the aforementioned.

14.3 This Certificate will remain valid for an unlimited period provided that the product/system and the manufacture and/or fabrication including all related and relevant processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

14.4 In granting this Certificate, the BBA is not responsible for:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- individual installations of the product/system, including the nature, design, methods and workmanship of or related to the installation
- the actual works in which the product/system is installed, used and maintained, including the nature, design, methods and workmanship of such works.

14.5 Any information relating to the manufacture, supply, installation, use and maintenance of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system is manufactured, supplied, installed, used and maintained. It does not purport in any way to restate the requirements of the Health & Safety at Work etc Act 1974, or of any other statutory, common law or other duty which may exist at the date of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care. In granting this Certificate, the BBA does not accept responsibility to any person or body for any loss or damage, including personal injury, arising as a direct or indirect result of the manufacture, supply, installation, use and maintenance of this product/system.

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