



RAINWATER GOODS | FACADES | FASCIAS | SOFFITS | COPINGS | COLUMN CASTINGS | WINDOW PODS

Rainwater Flow Calculation

Your Project Ref: Llangollen Museum

Estimate E114276

THE GUTTERCREST GROUP



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Client: Scott Architecture	Y/R:
Project: Llangollen Museum	O/R: E114276
Designer:	Date: 08/04/2024

Gutter Number:	1
BSEN12056-3:2000 Rainfall Category:	Cat 1
Rainfall Intensity (l/(s.sq.m)):	0.015

Catchment Area:	E114276 - Roof - 16 Triangles
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Roof length (m):
 Either: Pitch (deg):
 Vertical height (m):
 Height dif (valley)(m):
 Radius (m):

Eaves to ridge or ridge to ridge (m):
 Gutter length (m): 49.60
 Effective Area (sq.m): 194.5

Gutters:	
Type:	SBX2
Throat (mm):	100
Sole (mm):	60
Upstand (mm):	100
Area (Curved only) (sq.mm):	

Position: External
 Corners: Yes

1 Year Event

Outlets:	
Outlet type:	Rectangular
Diameter (mm):	
Rectangular (side1) (mm):	75
Rectangular (side2) (mm):	75
Side outlet width (mm):	
Side outlet depth (mm):	
Sump depth (mm):	
Number:	5
Max gutter length (m):	4.96
Max outlet length (m):	9.92
End or centre outlet:	Centre
Leafguard:	No

Results:	Pass
Flow type:	Freeflow
Gutter (l/s): Required:	0.29
Achieved:	1.96
Outlet (l/s): Required:	0.58
Achieved:	3.31
Min downpipe* with taper (mm):	50 x 50

Notes: All results to BSEN12056-3:2000 based on the input data. Please check input data has been correctly interpreted.
 Freeflow exists when outlet capacity is greater than required flow at a water depth that allows the water to flow freely in the gutter.
 In restricted flow, water is allowed to back up in the gutter, allowing smaller outlets to be used. Restricted is the usual type of flow in internal gutters, but is forbidden in external gutters.
 * Diameter for round, side dimension for square downpipes

Client: Scott Architecture
 Project: Llangollen Museum
 Designer:

Y/R:
 O/R: E114276
 Date: 08/04/2024

Gutter Number: 1
 BSEN12056-3:2000 Rainfall Category: Cat 1
 Rainfall Intensity (l/(s.sq.m)): 0.025

Catchment Area: E114276 - Roof - 16 Triangles

Roof length (m):

Either: Pitch (deg):

Vertical height (m):

Height dif (valley)(m):

Radius (m):

Eaves to ridge or ridge to ridge (m):

Gutter length (m): 49.60

Effective Area (sq.m): 194.5

Gutters:

Type: SBX2

Throat (mm): 100

Sole (mm): 60

Upstand (mm): 100

Area (Curved only) (sq.mm):

Position: External

Corners: Yes

Outlets:

Outlet type: Rectangular

Diameter (mm):

Rectangular (side1) (mm): 75

Rectangular (side2) (mm): 75

Side outlet width (mm):

Side outlet depth (mm):

Sump depth (mm):

Number: 5

Max gutter length (m): 4.96

Max outlet length (m): 9.92

End or centre outlet: Centre

Leafguard: No

Results: Pass

Flow type: Freeflow

Gutter (l/s): Required: 0.49

Achieved: 1.96

Outlet (l/s): Required: 0.97

Achieved: 3.31

Min downpipe* with taper (mm): 50 x 50

Notes: All results to BSEN12056-3:2000 based on the input data. Please check input data has been correctly interpreted.

Freeflow exists when outlet capacity is greater than required flow at a water depth that allows the water to flow freely in the gutter.

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* Diameter for round, side dimension for square downpipes

Client: Scott Architecture
 Project: Llangollen Museum
 Designer:

Y/R:
 O/R: E114276
 Date: 08/04/2024

Gutter Number: 1
 BSEN12056-3:2000 Rainfall Category: Cat 1
 Rainfall Intensity (l/(s.sq.m)): 0.029

Catchment Area: E114276 - Roof - 16
 Triangles

Roof length (m):

Either: Pitch (deg):

Vertical height (m):

Height dif (valley)(m):

Radius (m):

Eaves to ridge or ridge to ridge (m):

Gutter length (m): 49.60

Effective Area (sq.m): 194.5

Gutters:

Type: SBX2

Throat (mm): 100

Sole (mm): 60

Upstand (mm): 100

Area (Curved only) (sq.mm):

Position: External

Corners: Yes

10 Year Event

Outlets:

Outlet type: Rectangular

Diameter (mm):

Rectangular (side1) (mm): 75

Rectangular (side2) (mm): 75

Side outlet width (mm):

Side outlet depth (mm):

Sump depth (mm):

Number: 5

Max gutter length (m): 4.96

Max outlet length (m): 9.92

End or centre outlet: Centre

Leafguard: No

Results: Pass

Flow type: Freeflow

Gutter (l/s): Required: 0.56

Achieved: 1.96

Outlet (l/s): Required: 1.13

Achieved: 3.31

Min downpipe* with taper (mm): 50 x 50

Notes: All results to BSEN12056-3:2000 based on the input data. Please check input data has been correctly interpreted.

Freeflow exists when outlet capacity is greater than required flow at a water depth that allows the water to flow freely in the gutter.

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* Diameter for round, side dimension for square downpipes

Client:	Scott Architecture	Y/R:
Project:	Llangollen Museum	O/R: E114276
Designer:		Date: 08/04/2024

Gutter Number:	1
BSEN12056-3:2000 Rainfall Category:	Cat 1
Rainfall Intensity (l/(s.sq.m)):	0.029

Catchment Area:	E114276 - Roof - 16 Triangles
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Roof length (m):
 Either: Pitch (deg):
 Vertical height (m):
 Height dif (valley)(m):
 Radius (m):

Eaves to ridge or ridge to ridge (m):

Gutter length (m):	49.60
Effective Area (sq.m):	194.5

Gutters:

Type:	SBX2
Throat (mm):	100
Sole (mm):	60
Upstand (mm):	100
Area (Curved only) (sq.mm):	

Position:	External
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Corners:	Yes
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10 Year Event 2 Pipes

Outlets:

Outlet type:	Rectangular
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Diameter (mm):

Rectangular (side1) (mm):	75
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Rectangular (side2) (mm):	75
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Side outlet width (mm):

Side outlet depth (mm):

Sump depth (mm):

Number:	2
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Max gutter length (m):	12.40
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Max outlet length (m):	24.80
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End or centre outlet:	Centre
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Leafguard:	No
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Results: Pass

Flow type:	Freeflow
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Gutter (l/s): Required:	1.41
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Achieved:	1.75
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Outlet (l/s): Required:	2.82
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Achieved:	3.31
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Min downpipe* with taper (mm):	54 x 54
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Notes: All results to BSEN12056-3:2000 based on the input data. Please check input data has been correctly interpreted.
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