

# International Drainage Brochure

# Introduction

## 60 years of dependable drainage products

Based in the United Kingdom, Wade Drainage has been a recognised manufacturer and supplier of quality and reliable drainage systems for more than 60 years. Our drainage systems have been specified and installed in numerous construction projects worldwide.

Providing solutions for both roof and floor drainage, Wade can offer a comprehensive range of systems that efficiently drain and remove surface water.

The Wade technical team is available to offer advice and solutions to architects, consultants and contractors who are seeking to design and provide the most economical and efficient solutions to surface water containment and removal.



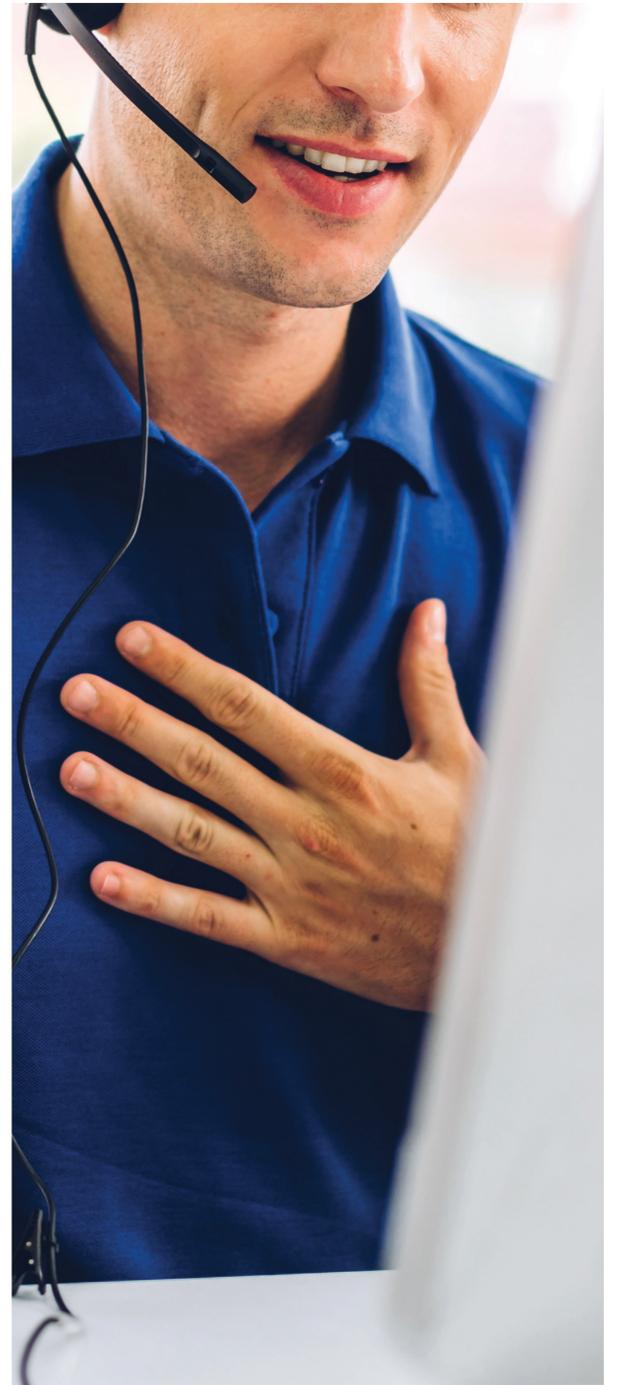
Recognised worldwide for drainage excellence



Quality by tradition. Performance by design



In-house technical expertise you can rely on



## Wade is part of the AWMS family

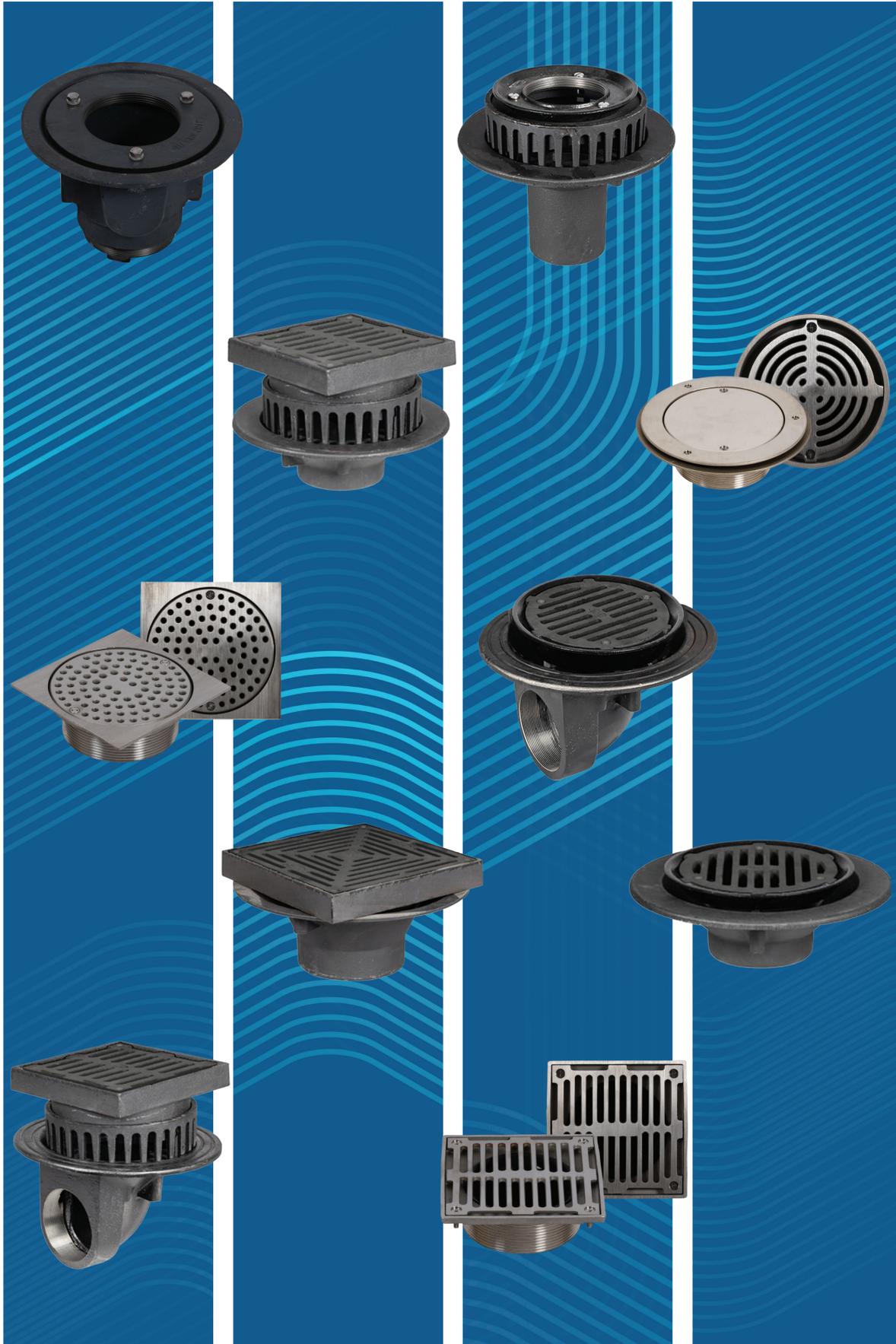


Alumasc (AWMS) is a UK-based supplier of premium building products. The majority of the group's business is focussed on sustainable building products that enable customers to manage energy and water use in the built environment.

They include: **Skyline** Architectural Aluminium; **Alumasc Rainwater** Gutters & Downpipes; **Harmer** Building Drainage; **Wade** Building Drainage and **Gatic** Drainage & Engineered Access Covers.



# Introduction



Introduction

Design  
Considerations

Adjustable Height

Direct  
Connection

Roof Outlets

Specification

# Quality & Sustainability

Alumasc is committed to developing its own measures to limit the adverse effects of its activities on the environment. To this end, Alumasc operates an environmental policy that fully integrates all aspects of company activities.



## Green Economy

The Alumasc Group plc is pleased to be recognised by London Stock Exchange as contributing to the global green economy. The Mark is given to companies and funds that derive more than 50% of revenues from environmental solutions.

The Alumasc Group plc provides high-quality, low carbon, sustainable building products, systems and solutions, which help manage the scarce resources of energy and water in the built environment, and improve quality of life for the owner/occupier.



## BSI ISO 9001:2015

This certification provides a structured framework for quality management systems (QMS), enabling us to enhance their overall efficiency and effectiveness. The standard also promotes a customer-centric approach, emphasising the importance of meeting customer requirements and delivering consistent, high-quality products and services.



## Sustainability

Alumasc actively pursues sustainability in its full range of products, and, with its partners and suppliers, is committed to putting consideration for the built and wider environment at the core of all aspects of current business and future development.

# Introduction - Range Summary

Wade floor drainage products are readily available in standard units with associated components. The standard range gives designers and installers great flexibility to create visually appealing and effective drainage in both new build and refurbishment projects, providing practical options for a vast number of applications in buildings across all sectors.

## Adjustable Height

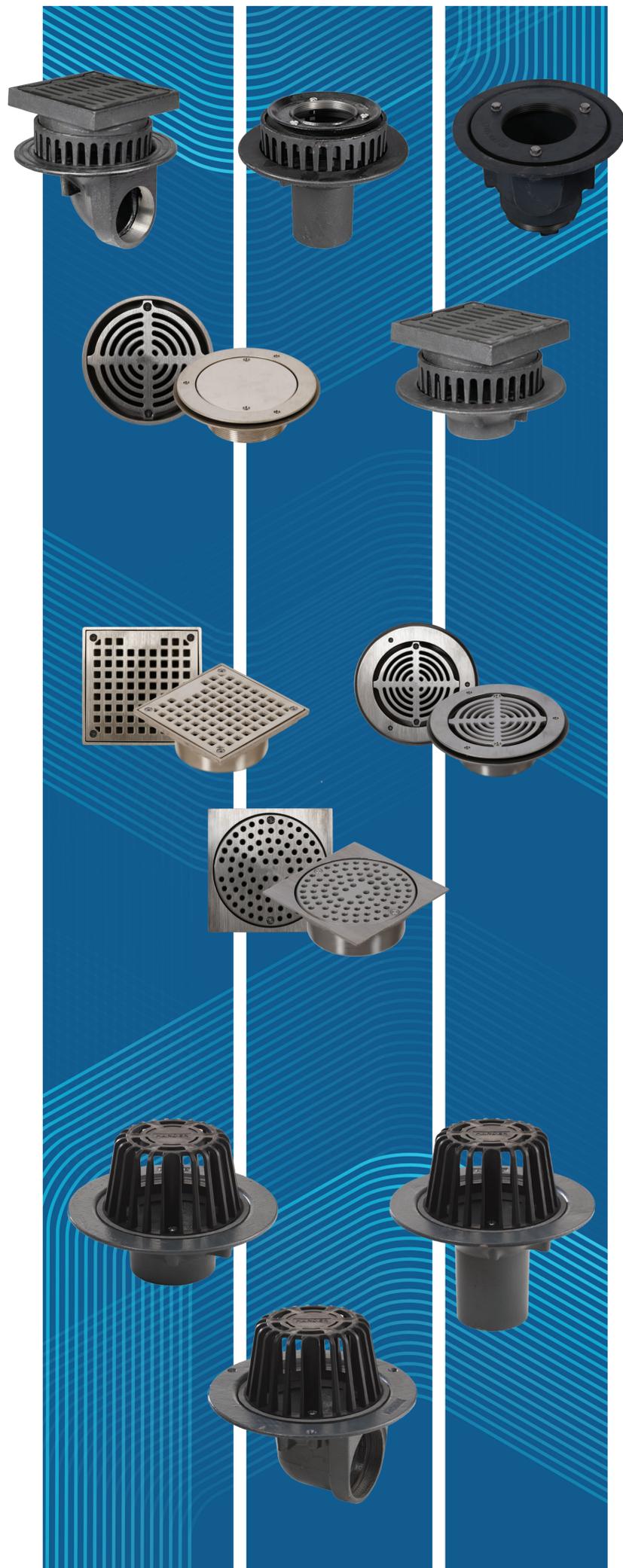
Adjustable Height gullies provide an accurate and efficient means of installation. The range comprises Vari-Level and Multi-Level, offering height adjustability for differing applications. Vari-Level provides the ultimate in design flexibility with a wide range of grating and bodies that are interchangeable to fit most drainage applications.

## Direct Connection

For applications where a gully body is not required, the Direct Connection range can be used to directly connect to pipework. A comprehensive range of high-quality gratings and rodding eyes are available.

## Roof Outlets

The Wade Roof drainage range features durable cast iron outlets designed for a variety of roof and balcony applications. Wade Roof outlets provide lasting performance and blend seamlessly with the roof and its surroundings.

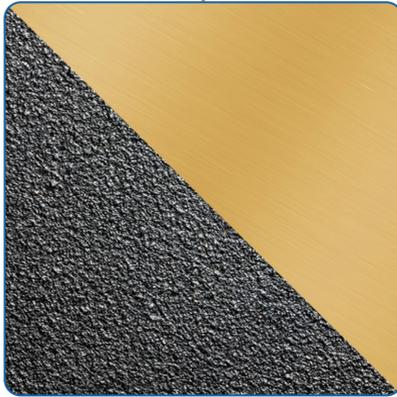


# Design Considerations

A few FAQ's that it is worth considering before you speak with our Sales & Technical team. Typically these questions are the starting point in specifying your ideal product.

## Aesthetics

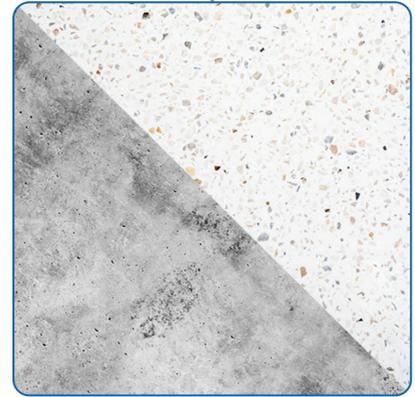
### Material Type



### Grating Style



### Floor Finish



## Performance

### Flow Rate



### Load Rating



### Interval Servicing



## Environment

### Industrial



### Commercial



### Hygiene



# Design Considerations

The quality and suitability of materials are key design considerations when choosing the appropriate drainage material for application. To help identify materials quickly and easily, we have introduced the following materials key throughout the brochure;

## Materials Key

### CI Cast Iron

- Cast Iron is a widely used metal in the drainage industry, its resistance to corrosion permits extended use under extreme conditions. Castings are surface coated to provide protection, paint will gradually wear off and is replaceable; oxidation (surface rusting) is a natural process which does not weaken the material. A zinc anti-corrosion coating is applied to certain castings by sherardizing. Used for bodies, membrane clamping collars, threaded pipework adaptors and accessories such as extensions.

### DI Ductile Iron

- A versatile and strong material, Ductile Iron is a type of cast iron known for its impact and fatigue resistance, elongation, and wear resistance due to the spherical (round) graphite structures in the metal. Used for Gratings, Ductile Iron provides a long durable service in high traffic areas. A zinc anti-corrosion coating is applied by sherardizing.

### PL Plastic

- Certain plastics provide a high degree of resistance to heat, chemical and abrasion resistance. Components such as removable traps, dip tubes, extensions and threaded pipework adaptors use a range of Polypropylene and ABS plastic.

### Stainless Steel (Grade 304)

- Stainless Steel is a corrosion-resistant metal containing significant amounts of nickel and chromium; Grade 304 stainless steel is used as standard, which is suitable for general use in and around buildings including food and hygiene applications. In areas with more aggressive environments, such as swimming pools or marine applications, grade 316 is available on request. Used for bodies, gratings, rodding eyes, filter buckets and fixings.

### NB Nickel Bronze

- Nickel Bronze is a cast alloy with a fine grain effect which blends well with most floor finishes. The nickel and copper content makes it a very durable material and is suited to a long-life service. When left, the material will gradually tarnish to a darker bronze but will keep its high lustre finish if cleaned/polished. Used for Gratings, Rodding Eyes.

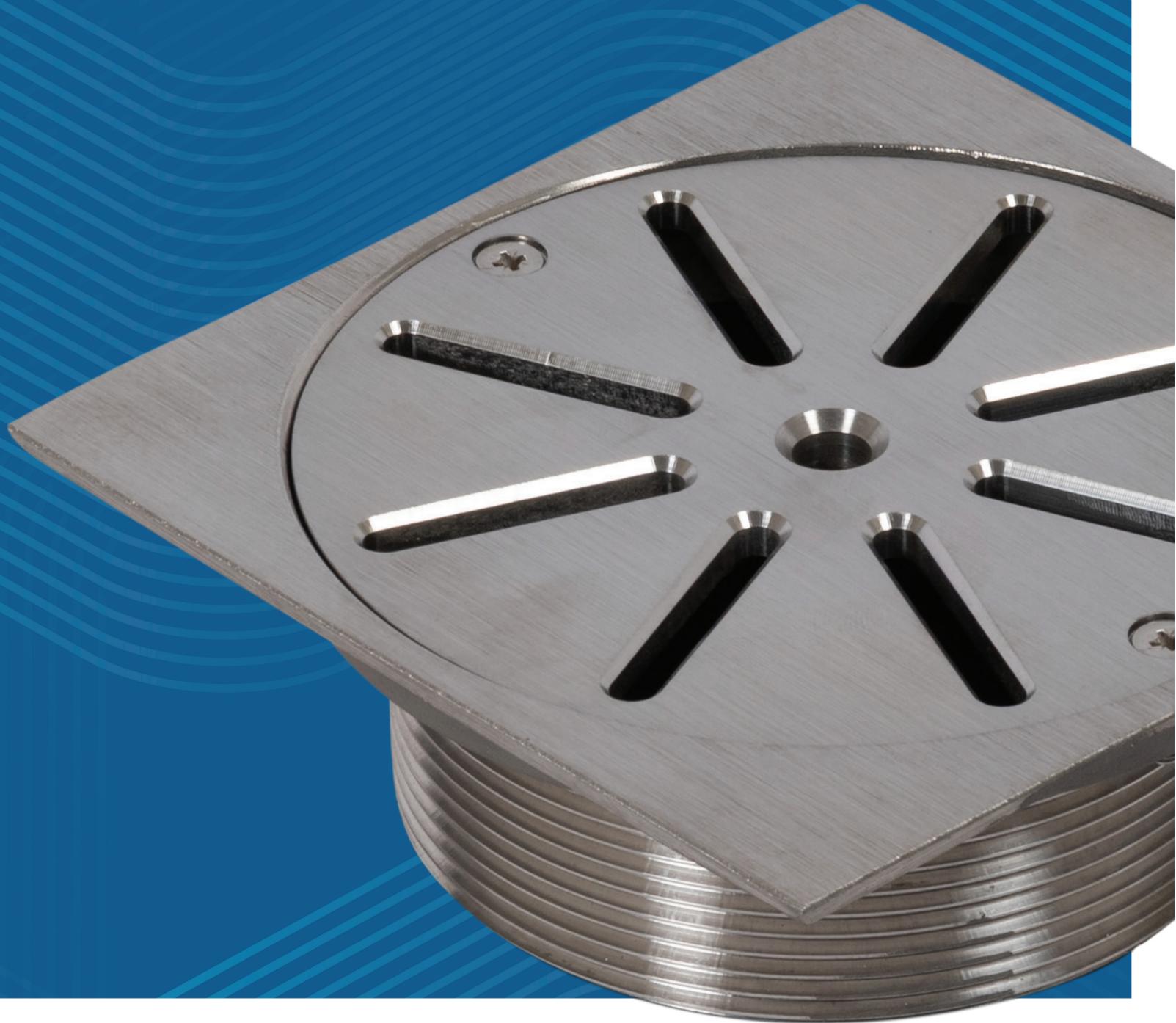
## Fixings

- A key practical design feature of the gully is its accessibility for maintenance; gratings and rodding eyes provide access to the drain below and are supplied with standard stainless steel fixing screws.



# Adjustable Height Gullies and Gratings

---



# Vari Level Bodies - Cast Iron

Vari-Level gullies provide a standard range of components that can be combined to give specifiers and designers a wide choice of materials flexible enough to suit many applications and floor finishes.

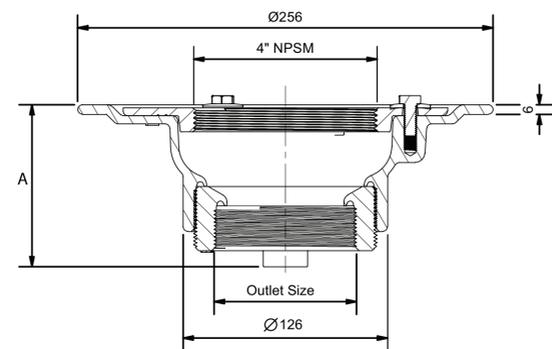
Vari-Level fine adjustment allows precise installation for finished floors, whilst the extensive range of accessories provides the ultimate in practicality and performance.

Cast iron drain bodies provide a wide flange which can be set at structural slab level to accept damp proof membranes up to 30mm thickness.

## WX/C2 Series - Vertical Outlet - Shallow Sump

CI

Outlet Size (BSP)	Connection	"A" Overall Height (mm)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
2" *	Threaded	95	7.0	2.9	WX/C202C.C
3" *	Threaded	95	6.2	2.9	WX/C203C.C
4"	Threaded	79	4.9	2.9	WX/C204C.C
83mm	Spigot	205	6.0	2.9	WX/C343C.C
110mm	Spigot	93	4.7	2.9	WX/C344C.C



WX/C2 - WX/C5 Series cast iron drain bodies offer a compact solution which is ideal for use in structural deck construction and for use with thin membranes. e.g. single ply

Note: Weephole is included as standard when the collar is positioned in a certain orientation.

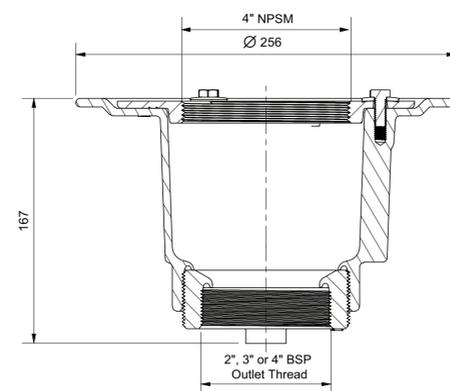
\* Outlet size: 2" & 3" are inclusive of threaded reducer

<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/C5 Series - Vertical Threaded Outlet - Deep Sump

CI

Outlet Size (BSP)	Connection	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
2" *	Threaded	10.0	2.9	WX/C502C.C
3" *	Threaded	9.2	2.9	WX/C503C.C
4"	Threaded	7.9	2.9	WX/C504C.C



WX/C2 - WX/C5 Series cast iron drain bodies offer a compact solution which is ideal for use in structural deck construction and for use with thin membranes. e.g. single ply

Note: Weephole is included as standard when the collar is positioned in a certain orientation.

Side inlets are available upon request.

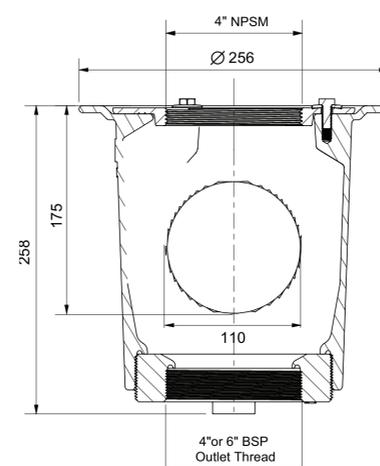
\* Outlet Size: 2" & 3" are inclusive of threaded reducer

<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/D4 Series Vertical Threaded Outlet - Deep Sump

CI

Outlet Size (BSP)	Connection	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
4" *	Threaded	14.4	2.9	WX/D404C.D/2B/4
6"	Threaded	11.1	2.9	WX/D406C.D/2B/4



WX/D4 Series cast iron drain bodies offer a compact solution which is ideal for use in structural deck construction and for use with thin membranes. e.g. single ply

\* Outlet Size: 4" are inclusive of threaded reducer

<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

**Side Inlets:**  
This diagram denotes the optional side inlets, as shown in black.



# Vari Level Bodies - Cast Iron

## WX/G2 - G3 Series Horizontal Outlet - 50mm water seal trap

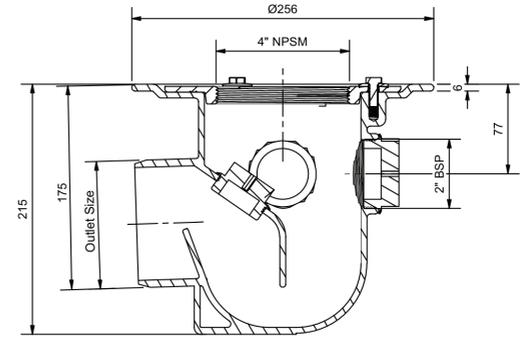
CI

Outlet Size	Connection	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
110mm (+ side inlets)	Spigot	10.0	2.9	WX/G304C/3A/2
110mm	Spigot	10.0	2.9	WX/G304C
4" (+ side inlets)	Threaded	10.5	2.9	WX/G204C/3A/2
4"	Threaded	10.5	2.9	WX/G204C

WX/G2 - WX/G3 Series cast iron drain bodies offer a compact solution which is ideal for use in structural deck construction and for use with thin membranes. e.g. single ply

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

**Side Inlets:**  
This diagram denotes the optional side inlets, as shown in black.



## WX/D10 - Vertical Threaded Outlet - Shallow Sump

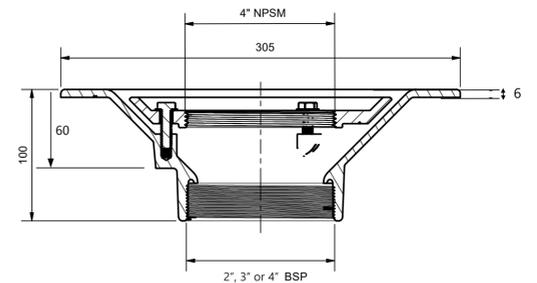
CI

Outlet Size (BSP)	Connection	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
2" *	Threaded	7.0	1.7	WX/D1002C.CD
3" *	Threaded	6.8	3.6	WX/D1003C.CD
4"	Threaded	5.5	3.6	WX/D1004C.CD

WX/D10 - WX/D12 series cast iron drain bodies provide a wide flange which can be set at structural slab level to accept damp proof membranes up to 30mm thickness.

\*Outlet Size: 2" & 3" are inclusive of threaded reducer

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.



## WX/D11 - Vertical Spigot Outlet - Shallow Sump

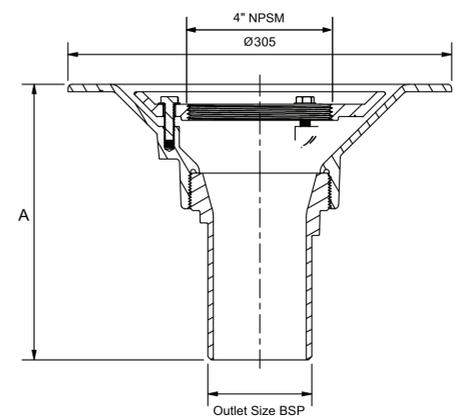
CI

Outlet Size (mm)	"A" Overall Height (mm)	Connection	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
60 *	220	Spigot	7.2	1.7	WX/D1107C.CD
83 *	220	Spigot	7.5	3.6	WX/D1108C.CD
110	190	Spigot	6.7	3.6	WX/D1109C.CD

WX/D10 - WX/D12 series cast iron drain bodies provide a wide flange which can be set at structural slab level to accept damp proof membranes up to 30mm thickness.

\*Outlet Size: 60mm & 83mm are inclusive of threaded reducer

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.



## WX/D12 - Horizontal Threaded Outlet - Shallow Sump

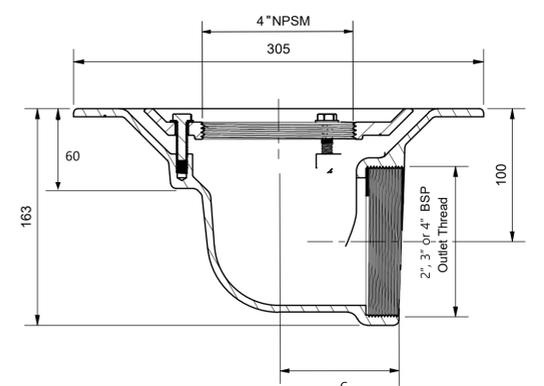
CI

Outlet Size (BSP)	C (mm)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
2" *	105	9.0	1.7	WX/D1207C.CD
3" *	105	8.2	3.6	WX/D1208C.CD
4"	90	7.0	3.6	WX/D1209C.CD

WX/D10 - WX/D12 series cast iron drain bodies provide a wide flange which can be set at structural slab level to accept damp proof membranes up to 30mm thickness.

\*Outlet Size: 2" & 3" are inclusive of threaded reducer

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

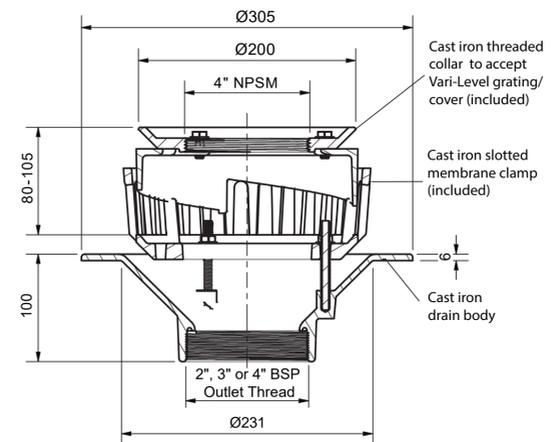


# Vari Level Bodies - Cast Iron

## WX/SD10 - Vertical Threaded Outlet - Shallow Sump

CI

Outlet Size (BSP)	Connection	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
2" *	BSP	11.8	1.69	WX/SD102
3" *	BSP	10.8	4.97	WX/SD103
4"	BSP	10.2	4.97	WX/SD104



WX/SD10 - WX/SD30 series cast iron drain bodies can be used for sub-surface drainage such as with cavity membranes.

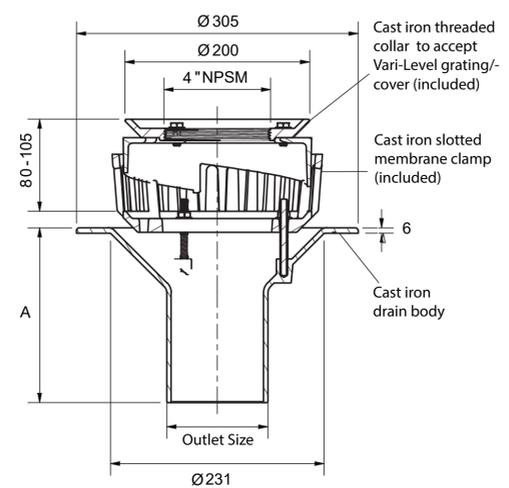
\*Outlet Size: 2" & 3" are inclusive of threaded reducer

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/SD20 - Vertical Spigot Outlet - Shallow Sump

CI

Outlet Size (mm)	Connection	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
60 *	Spigot	10	1.69	WX/SD202
83 *	Spigot	11.6	4.97	WX/SD203
110	Spigot	11.4	4.97	WX/SD204



WX/SD10 - WX/SD30 series cast iron drain bodies can be used for sub-surface drainage such as with cavity membranes.

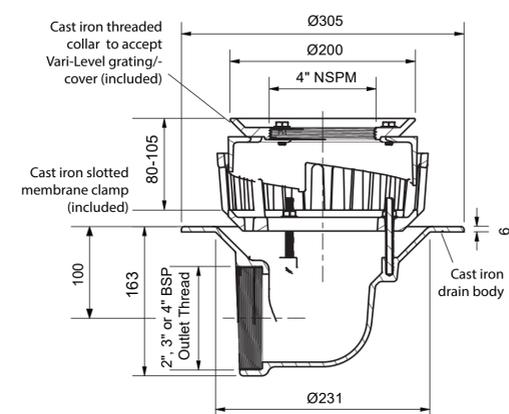
\*Note: 60mm & 83mm are inclusive of threaded reducer

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/SD30 - Horizontal Threaded Outlet - Shallow Sump

CI

Outlet Size (BSP)	Connection	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Spec Code
2" *	BSP	12.9	1.69	WX/SD302
3" *	BSP	12.3	4.97	WX/SD303
4"	BSP	14.1	4.97	WX/SD304



WX/SD10 - WX/SD30 series cast iron drain bodies can be used for sub-surface drainage such as with cavity membranes.

\*Outlet Size: 2" & 3" are inclusive of threaded reducer

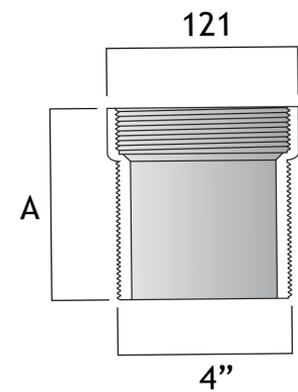
<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

# Vari Level Extensions - Cast Iron

## Extension Piece

CI

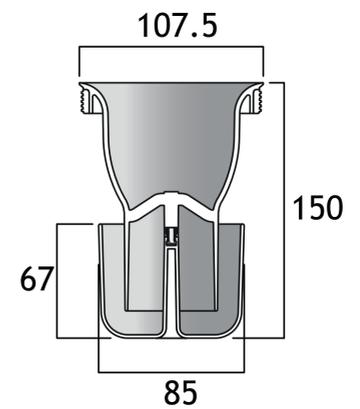
Thread size NPSM		Connection	'A' Height Adjustment (mm)		Weight (kg)	Spec Code
Female (inches)	Male (inches)		Min.	Max.		
4"	4"	Threaded	35	55	1.3	WX/U103
4"	4"	Threaded	45	105	2.4	WX/U104



## Foul Air Trap

PL

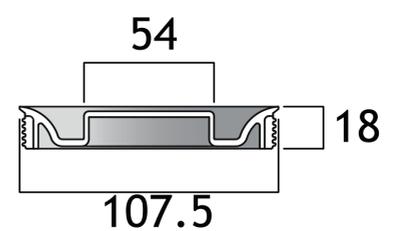
Weight (kg)	Flow Rate (l/s)*	Spec Code
0.2	1.8	WXF/FT



## Access Seal - For Rodding Eye

PL

Weight (kg)	Spec Code
0.1	WXF/AP



# Vari-level Gratings - Nickel Bronze

## Circular Gratings and Rodding Eyes - for tiled, resin and concrete floors

NB

WX/CPS/NB/4



WX/CSG/NB/4



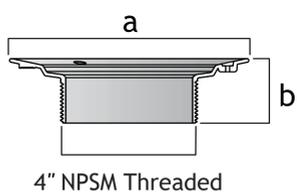
WX/CCR/NB/4



WX/CAL/NB/4



WX/CSP/NB/4



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Throat Dia (inches)	Flow Rate (l/s)	Load Rating	Weight (kg)	Height Gained Max (mm)	Height Gained Min (mm)
WX/CPS/NB/4	148	54	4" NPSM	2.21	L15	1.87	40	20
WX/CSG/NB/4	148	54	4" NPSM	1.15	L15	1.99	40	20
WX/CCR/NB/4	148	54	4" NPSM	2.52	L15	1.90	40	20
WX/CAL/NB/4	148	54	4" NPSM	2.20	L15	1.80	40	20
WX/CSP/NB/4	148	54	4" NPSM	-	L15	2.30	40	20

## Circular Gratings - for flexible sheet flooring

NB

WX/VPS/NB/4



WX/VSG/NB/4



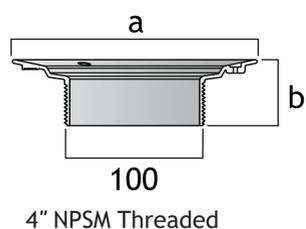
WX/VCR/NB/4



WX/VAL/NB/4



WX/VSP/NB/4



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Throat Dia (inches)	Flow Rate (l/s)	Load Rating	Weight (kg)	Height Gained Max (mm)	Height Gained Min (mm)
WX/VPS/NB/4	200	54	4" NPSM	2.21	L15	2.32	40	20
WX/VSG/NB/4	200	54	4" NPSM	1.15	L15	2.44	40	20
WX/VCR/NB/4	200	54	4" NPSM	2.52	L15	3.15	40	20
WX/VAL/NB/4	200	54	4" NPSM	1.80	L15	3.45	40	20
WX/VSP/NB/4	200	54	4" NPSM	-	L15	3.55	40	20

# Vari-level Gratings - Nickel Bronze

Square Gratings and Rodding Eyes - for tiled, resin and concrete floors

NB

WX/T15PS/NB/4



WX/T15SG/NB/4



WX/T15CR/NB/4



WX/T15AL/NB/4



WX/T15SP/NB/4



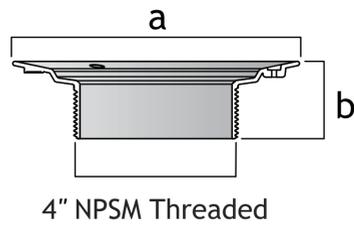
WX/SSL/NB/4



WX/SSH/NB/4



WX/SSP/NB/4



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Throat Dia (inches)	Flow Rate (l/s)	Load Rating	Weight (kg)	Height Gained Max (mm)	Height Gained Min (mm)
WX/T15PS/NB/4	150	54	4" NPSM	2.21	L15	1.92	40	20
WX/T15SG/NB/4	150	54	4" NPSM	1.15	L15	2.04	40	20
WX/T15CR/NB/4	150	54	4" NPSM	2.52	L15	1.93	40	20
WX/T15AL/NB/4	150	54	4" NPSM	1.80	L15	2.25	40	20
WX/T15SP/NB/4	150	54	4" NPSM	-	L15	2.35	40	20
WX/SSL/NB/4	150	54	4" NPSM	2.82	L15	2.20	40	20
WX/SSH/NB/4	150	54	4" NPSM	2.19	L15	2.30	40	20
WX/SSP/NB/4	150	54	4" NPSM	-	L15	2.50	40	20

# Vari-level Gratings - Stainless Steel

## Circular Gratings and Rodding Eyes - for tiled, resin and concrete floors

SS

WX/CPS/SS/4



WX/CSG/SS/4



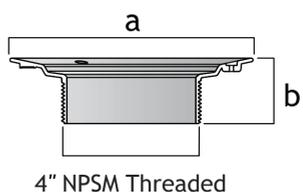
WX/CCR/SS/4



WX/CAL/SS/4



WX/CSP/SS/4



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Throat Dia (inches)	Flow Rate (l/s)	Load Rating	Weight (kg)	Height Gained Max (mm)	Height Gained Min (mm)
WX/CPS/SS/4	148	54	4" NPSM	2.21	L15	1.87	40	20
WX/CSG/SS/4	148	54	4" NPSM	1.15	L15	2.10	40	20
WX/CCR/SS/4	148	54	4" NPSM	2.52	L15	1.78	40	20
WX/CAL/SS/4	148	54	4" NPSM	1.80	L15	1.88	40	20
WX/CSP/SS/4	148	54	4" NPSM	-	L15	2.03	40	20

## Circular Gratings and Rodding Eyes - for flexible sheet flooring

SS

WX/VPS/SS/4



WX/VSG/SS/4



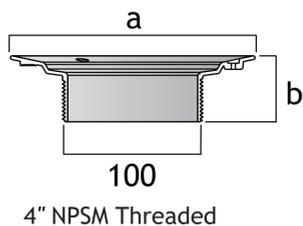
WX/VCR/SS/4



WX/VAL/SS/4



WX/VSP/SS/4



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Throat Dia (inches)	Flow Rate (l/s)	Load Rating	Weight (kg)	Height Gained Max (mm)	Height Gained Min (mm)
WX/VPS/SS/4	200	54	4" NPSM	-	L15	2.03	40	20
WX/VSG/SS/4	200	54	4" NPSM	1.15	L15	2.31	40	20
WX/VCR/SS/4	200	54	4" NPSM	2.52	L15	2.49	40	20
WX/VAL/SS/4	200	54	4" NPSM	1.80	L15	2.59	40	20
WX/VSP/SS/4	200	54	4" NPSM	-	L15	2.74	40	20

Introduction

Design Considerations

Adjustable Height

Direct Connection

Roof Outlets

Specification

# Vari-level Gratings - Stainless Steel

Square Gratings and Rodding Eyes - for tiled, resin and concrete floors

SS

WX/T15PS/SS/4



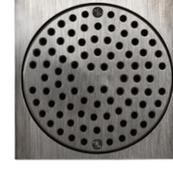
WX/T15SG/SS/4



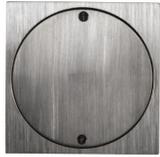
WX/T15CR/SS/4



WX/T15AL/SS/4



WX/T15SP/SS/4



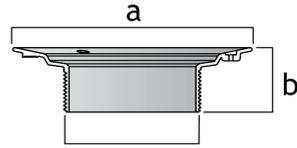
WX/SSL/SS/4



WX/SSH/SS/4



WX/SSP/SS/4



4" NPSM Threaded

Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Throat Dia (inches)	Flow Rate (l/s)	Load Rating	Weight (kg)	Height Gained Max (mm)	Height Gained Min (mm)
WX/T15PS/SS/4	150	54	4" NPSM	2.21	L15	1.92	40	20
WX/T15SG/SS/4	150	54	4" NPSM	1.15	L15	2.02	40	20
WX/T15CR/SS/4	150	54	4" NPSM	2.52	L15	1.88	40	20
WX/T15AL/SS/4	150	54	4" NPSM	1.80	L15	1.90	40	20
WX/T15SP/SS/4	150	54	4" NPSM	-	L15	2.15	40	20
WX/SSL/SS/4	150	54	4" NPSM	2.82	L15	1.95	40	20
WX/SSH/SS/4	150	54	4" NPSM	2.19	L15	2.11	40	20
WX/SSP/SS/4	150	54	4" NPSM	-	L15	2.28	40	20

# Vari-level Gratings - Ductile Iron

Heavy Duty Gratings - For light vehicular traffic

DI

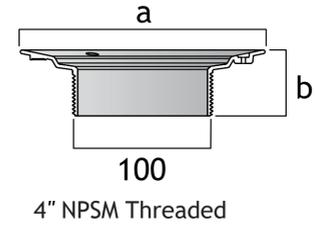
WX/C220/DI/4



WX/S300/DI/4



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Throat Dia (inches)	Flow Rate (l/s)	Load Rating	Weight (kg)
WX/C220/DI/4	220	77	4" NPSM	3.5	L15	3.6
WX/S300/DI/4	323	130	4" NPSM	6.9	M125	12.8



Introduction

Design Considerations

Adjustable Height

Direct Connection

Roof Outlets

Specification

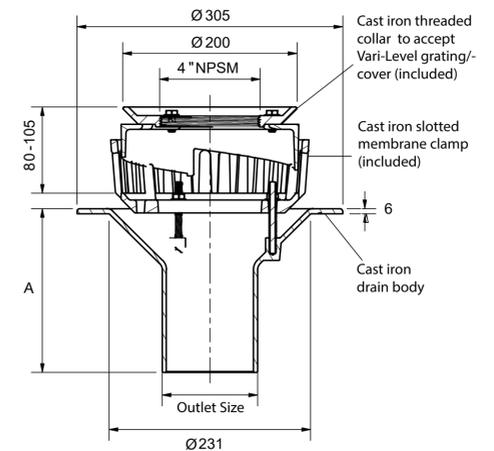
# Multi-Level Gullies - Shallow Sump

## WX/WD20 Series Vertical Spigot Outlet - Circular Grate

CI

Outlet Size (mm)	'A' Overall Height (mm)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Load Rating	Spec Code
60 *	220	12.7	1.7	L15	WX/WD202
83 *	220	13.3	3.6	L15	WX/WD203
110	190	12.2	3.6	L15	WX/WD204

Height Adjustability	
Min (mm)	Max (mm)
80	105



\* Note: 60mm & 83mm are inclusive of threaded reducer

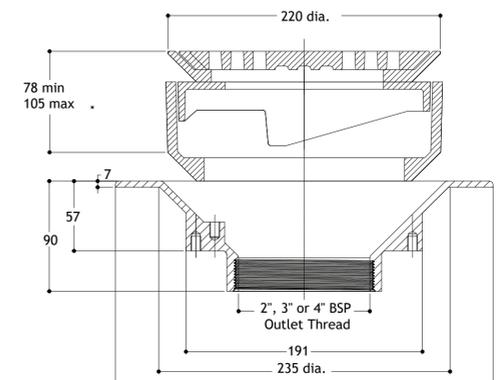
<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/WD22 Series Vertical Threaded Outlet - Circular Grate

CI

Outlet Size (BSP)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Load Rating	Spec Code
2" *	13.1	1.7	L15	WX/WD222
3" *	12.3	3.6	L15	WX/WD223
4"	11.0	3.6	L15	WX/WD224

Height Adjustability	
Min (mm)	Max (mm)
78	105



\* Note: 2" & 3" are inclusive of threaded reducer

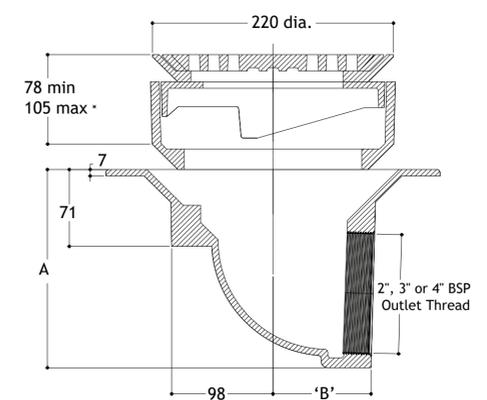
<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/WD23 Series Horizontal Threaded Outlet - Circular Grate

CI

Outlet Size (BSP)	A Overall Height (mm)	B (mm)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Load Rating	Spec Code
2" *	231	305	16.8	1.7	L15	WX/WD232
3" *	60	220	16.0	3.6	L15	WX/WD233
4"	60	190	14.8	3.6	L15	WX/WD234

Height Adjustability	
Min (mm)	Max (mm)
78	105



\* Note: 2" & 3" are inclusive of threaded reducer

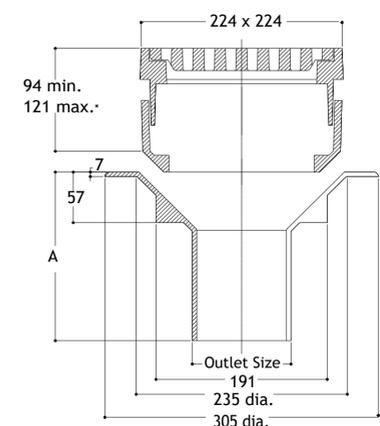
<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/WD30 Series Vertical Spigot Outlet - Square Grate

CI

Outlet Size (mm)	A Overall Height (mm)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Load Rating	Spec Code
60 *	220	16.9	1.7	L15	WX/WD302
83 *	220	17.5	3.6	L15	WX/WD303
110	190	16.4	3.6	L15	WX/WD304

Height Adjustability	
Min (mm)	Max (mm)
94	121



\* Note: 60mm & 83mm are inclusive of threaded reducer

<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

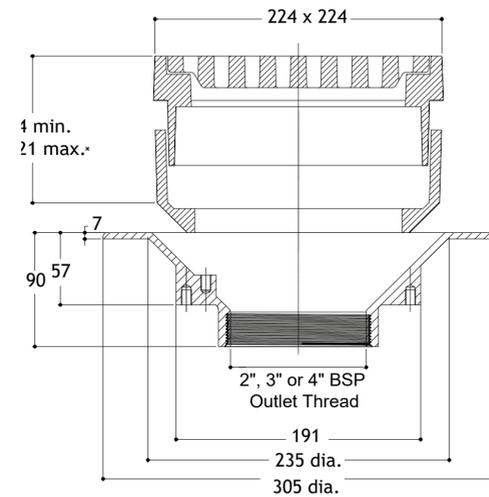
# Multi-Level Gullies - Shallow Sump

## WX/WD32 Series Vertical Threaded Outlet - Square Gate

CI

Outlet Size (BSP)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Load Rating	Spec Code
2" *	17.3	1.7	L15	WX/WD322
3" *	16.5	3.6	L15	WX/WD323
4"	15.2	3.6	L15	WX/WD324

Height Adjustability	
Min (mm)	Max (mm)
94	121



\* Note: 2" & 3" are inclusive of threaded reducer

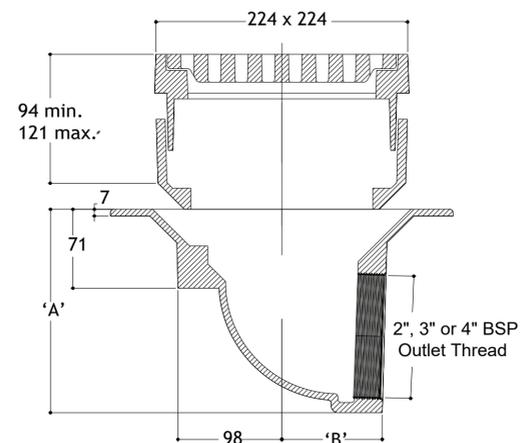
<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/WD33 Series Horizontal Threaded Outlet - Square Gate

CI

Outlet Size (BSP)	A (mm)	B (mm)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Load Rating	Spec Code
2" *	231	305	18.7	1.7	L15	WX/WD332
3" *	60	220	17.9	3.6	L15	WX/WD333
4"	60	190	16.7	3.6	L15	WX/WD334

Height Adjustability	
Min (mm)	Max (mm)
94	121



\* Note: 2" & 3" are inclusive of threaded reducer

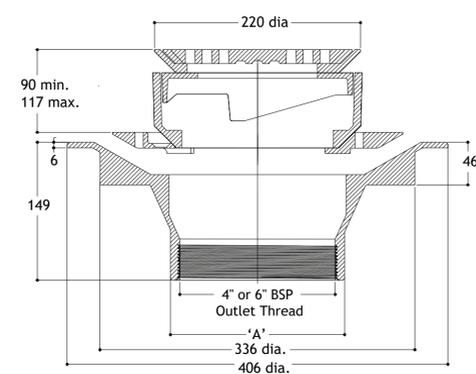
<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/WD51 Series Vertical Threaded Outlet - Circular Gate

CI

Outlet Size (BSP)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Load Rating	Spec Code
4"	20.9	3.8	L15	WX/WD514
6"	19.2	3.8	L15	WX/WD516

Height Adjustability	
Min (mm)	Max (mm)
90	117



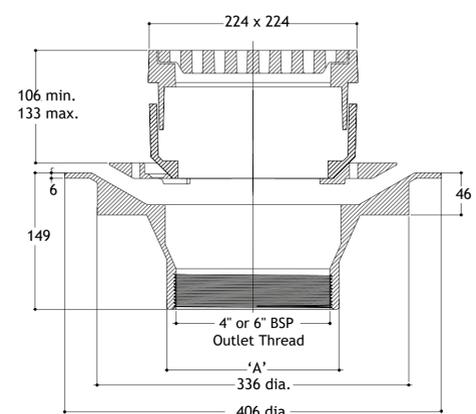
<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

## WX/WD61 Series Vertical Threaded Outlet - Square Gate

CI

Outlet Size (BSP)	Weight (kg)	Flow Rate <sup>1</sup> (l/s)	Load Rating	Spec Code
4"	24.0	3.8	L15	WX/WD614
6"	22.3	3.8	L15	WX/WD616

Height Adjustability	
Min (mm)	Max (mm)
106	133



<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

# Direct Connection

---



# Direct Connection Gratings - Nickel Bronze

## Circular Gratings and Rodding Eyes - for tiled, resin and concrete floors

NB

WX/CPS/NB/110



WX/CSG/NB/110



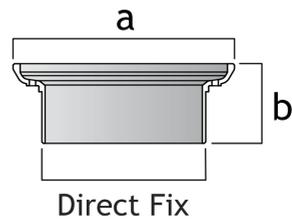
WX/CCR/NB/110



WX/CAL/NB/110



WX/CSP/NB/110



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Spigot Diameter (o.d mm)	Flow Rate (l/s)	Load Rating	Weight (kg)
WX/CPS/NB/110	148	54	110	2.21	L15	1.89
WX/CSG/NB/110	148	54	110	1.15	L15	1.99
WX/CCR/NB/110	148	54	110	2.52	L15	1.90
WX/CAL/NB/110	148	54	110	1.80	L15	2.20
WX/CSP/NB/110	148	54	110	-	L15	2.30

## Circular Gratings and Rodding Eyes - for flexible sheet flooring

NB

WX/VPS/NB/110



WX/VSG/NB/110



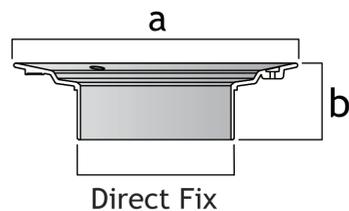
WX/VCR/NB/110



WX/VAL/NB/110



WX/VSP/NB/110



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Spigot Diameter (o.d mm)	Flow Rate (l/s)	Load Rating	Weight (kg)
WX/VPS/NB/110	200	54	110	2.21	L15	2.32
WX/VSG/NB/110	200	54	110	1.15	L15	2.44
WX/VCR/NB/110	200	54	110	2.52	L15	3.15
WX/VAL/NB/110	200	54	110	1.80	L15	3.45
WX/VSP/NB/110	200	54	110	-	L15	3.55

Introduction

Design Considerations

Adjustable Height

Direct Connection

Roof Outlets

Specification

# Direct Connection Gratings - Nickel Bronze

Square Gratings and Rodding Eyes - for tiled, resin and concrete floors

NB

WX/T15PS/NB/110



WX/T15SG/NB/110



WX/T15CR/NB/110



WX/T15AL/NB/110



WX/T15SP/NB/110



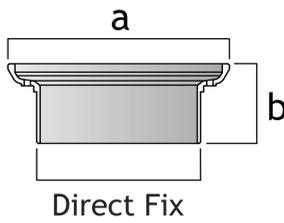
WX/SSL/NB/110



WX/SSH/NB/110



WX/SSP/NB/110



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Spigot Diameter (o.d mm)	Flow Rate (l/s)	Load Rating	Weight (kg)
WX/T15PS/NB/110	150	54	110	2.21	L15	1.92
WX/T15SG/NB/110	150	54	110	1.15	L15	2.04
WX/T15CR/NB/110	150	54	110	2.52	L15	1.93
WX/T15AL/NB/110	150	54	110	1.80	L15	2.25
WX/T15SP/NB/110	150	54	110	-	L15	2.35
WX/SSL/NB/110	150	54	110	2.82	L15	2.20
WX/SSH/NB/110	150	54	110	2.19	L15	2.30
WX/SSP/NB/110	150	54	110	-	L15	2.50

# Direct Connection Gratings - Stainless Steel

## Circular Gratings - for tiled, resin and concrete floors

SS

WX/CPS/SS/110



WX/CSG/SS/110



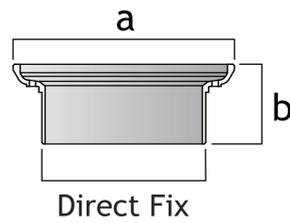
WX/CCR/SS/110



WX/CAL/SS/110



WX/CSP/SS/110



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Spigot Diameter (o.d mm)	Flow Rate (l/s)	Load Rating	Weight (kg)
WX/CPS/SS/110	148	54	110	2.21	L15	1.87
WX/CSG/SS/110	148	54	110	1.15	L15	2.10
WX/CCR/SS/110	148	54	110	2.52	L15	1.78
WX/CAL/SS/110	148	54	110	1.80	L15	1.88
WX/CSP/SS/110	148	54	110	-	L15	2.03

## Circular Gratings - for tiled, resin and concrete floors

SS

WX/VPS/SS/110



WX/VSG/SS/110



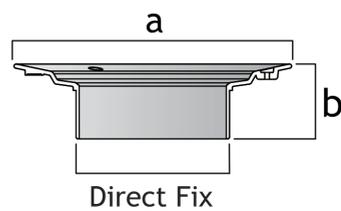
WX/VCR/SS/110



WX/VAL/SS/110



WX/VSP/SS/110



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Spigot Diameter (o.d mm)	Flow Rate (l/s)	Load Rating	Weight (kg)
WX/VPS/SS/110	200	54	110	2.21	L15	2.10
WX/VSG/SS/110	200	54	110	1.15	L15	2.31
WX/VCR/SS/110	200	54	110	2.52	L15	2.49
WX/VAL/SS/110	200	54	110	1.80	L15	2.59
WX/VSP/SS/110	200	54	110	-	L15	2.74

Introduction

Design Considerations

Adjustable Height

Direct Connection

Roof Outlets

Specification

# Direct Connection Gratings - Stainless Steel

Square Gratings - for tiled, resin and concrete floors

SS

WX/T15PS/SS/110



WX/T15SG/SS/110



WX/T15CR/SS/110



WX/T15AL/SS/110



WX/T15SP/SS/110



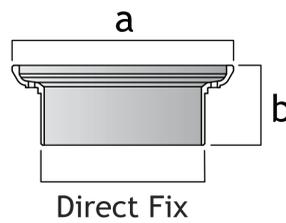
WX/SSL/SS/110



WX/SSH/SS/110



WX/SSP/SS/110



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Spigot Diameter (o.d mm)	Flow Rate (l/s)	Load Rating	Weight (kg)
WX/T15PS/SS/110	150	54	110	2.21	L15	1.92
WX/T15SG/SS/110	150	54	110	1.15	L15	2.02
WX/T15CR/SS/110	150	54	110	2.52	L15	1.88
WX/T15AL/SS/110	150	54	110	1.80	L15	1.90
WX/T15SP/SS/110	150	54	110	-	L15	2.15
WX/SSL/SS/110	150	54	110	2.82	L15	1.95
WX/SSH/SS/110	150	54	110	2.19	L15	2.11
WX/SSP/SS/110	150	54	110	-	L15	2.28

# Direct Connection Gratings - Ductile Iron

Heavy Duty Gratings - For light vehicular traffic

DI

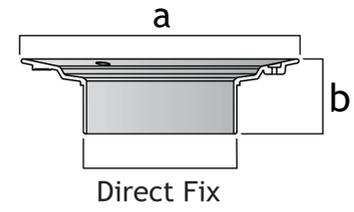
WX/C220/DI/110



WX/S300/DI/110



Product Code	'A' Overall Size (mm)	'B' Overall Height (mm)	Spigot Diameter (o.d mm)	Flow Rate (l/s)	Load Rating	Weight (kg)
WX/C220/DI/110	220	77	110	3.5	L15	3.6
WX/S300/DI/110	323	130	110	6.9	M125	12.8



Introduction

Design Considerations

Adjustable Height

Direct Connection

Roof Outlets

Specification

# Fixed Height - Shallow Sump

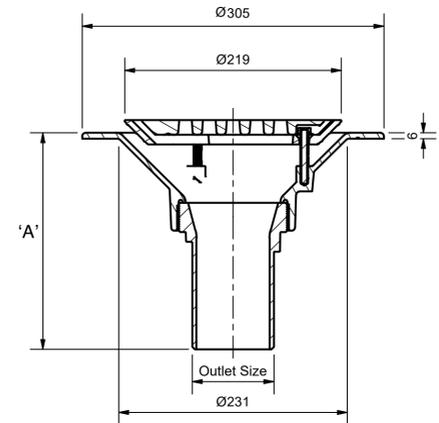
## WX/WB30 Series Vertical Spigot Outlet - Shallow Sump

CI

Outlet Size (mm)	A (mm)	Load Rating	Aperture (mm)	Flow Rate <sup>1</sup> (L/s)	Weight (kg)	Spec Code
60 *	220	L15	13	1.7	8.5	WX/WB302
83 *	220	L15	13	3.6	9.1	WX/WB303
110	190	L15	13	3.6	8.0	WX/WB304

\* Note: 60mm & 83mm are inclusive of threaded reducer

<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.



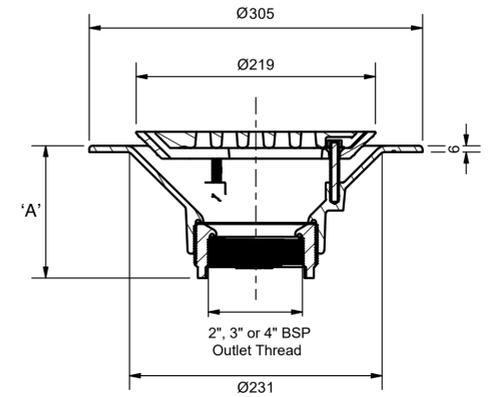
## WX/WB32 Series Vertical Threaded Outlet - Shallow Sump

CI

Outlet Size (BSP)	A (mm)	Load Rating	Aperture (mm)	Flow Rate <sup>1</sup> (L/s)	Weight (kg)	Spec Code
2" *	90	L15	13	1.7	1.7	WX/WB322
3" *	90	L15	13	3.6	3.6	WX/WB323
4"	90	L15	13	3.6	3.6	WX/WB324

\* Note: 2" & 3" are inclusive of threaded reducer

<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.



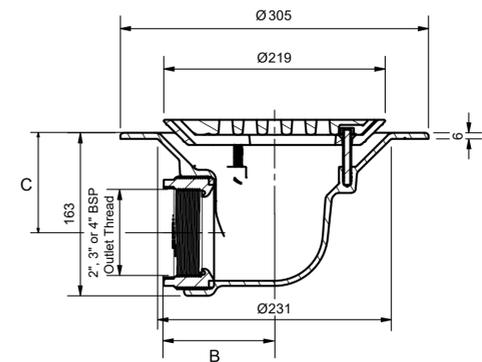
## WX/WB33 Series Horizontal Threaded Outlet - Shallow Sump

CI

Outlet Size (BSP)	A (mm)	B (mm)	C (mm)	Load Rating	Aperture (mm)	Flow Rate <sup>1</sup> (L/s)	Weight (kg)	Spec Code
2" *	165	105	80.5	L15	13	1.7	10.3	WX/WB332
3" *	165	105	67.5	L15	13	3.6	9.5	WX/WB333
4"	165	90	117	L15	13	3.6	8.3	WX/WB334

\* Note: 2" & 3" are inclusive of threaded reducer

<sup>1</sup> Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.



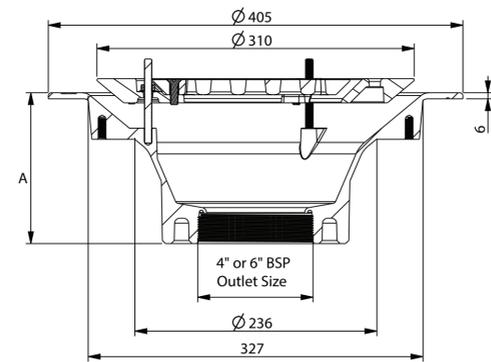
# Fixed Height - Deep Sump

## WX/WB61 Series Vertical Threaded Outlet - Deep Sump

DI

Outlet Size (BSP)	A (mm)	Load Rating	Aperture (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Spec Code
4"	171	L15	9	3.8	26.4	WX/WB614
6"	149	L15	9	3.8	23.9	WX/WB616

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.

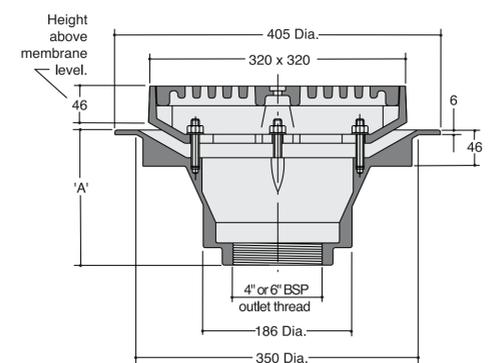


## WX/WB51 Series Vertical Threaded Outlet - Deep Sump

DI

Outlet Size (BSP)	A (mm)	Load Rating	Aperture (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Spec Code
4"	154	M125	9	3.8	24.8	WX/WB514
6"	154	M125	9	3.8	23.1	WX/WB516

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with the use of a compulsory clamp plate and 20mm head of water.



# Roof Outlets

---



# Roof Outlets - Medium Sump

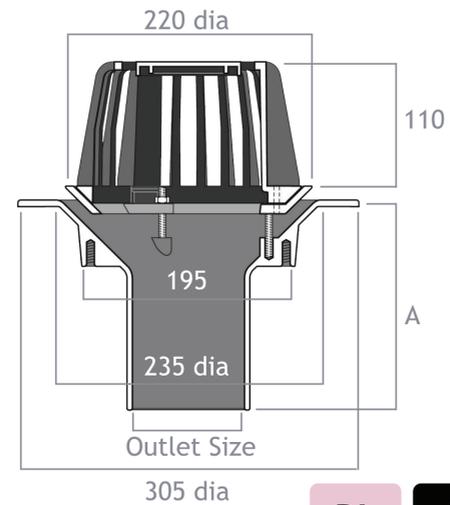
## Spigot Outlet - Domical Grate

PL CI

Outlet Size (mm)	A (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Spec Code
60 *	238	1.69	7.2	WX/WB202
83 *	165	4.97	4.9	WX/WB203
110	190	4.97	5.8	WX/WB204

\* Note: 60mm & 83mm are inclusive of threaded reducer complete with plastic dome grate

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with use of compulsory clamp plate and 35mm head of water



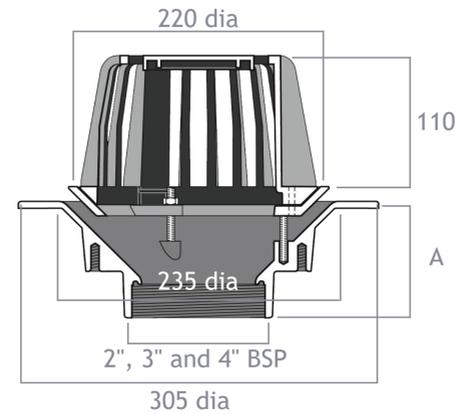
PL CI

## Vertical Threaded Outlet - Domical Grate

Outlet Size (BSP)	A (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Spec Code
2" *	112	1.69	6.2	WX/WB222
3" *	112	4.97	5.2	WX/WB223
4"	100	4.97	4.6	WX/WB224

\* Note: 2" & 3" are inclusive of threaded reducer complete with plastic dome grate

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with use of compulsory clamp plate and 35mm head of water



PL CI

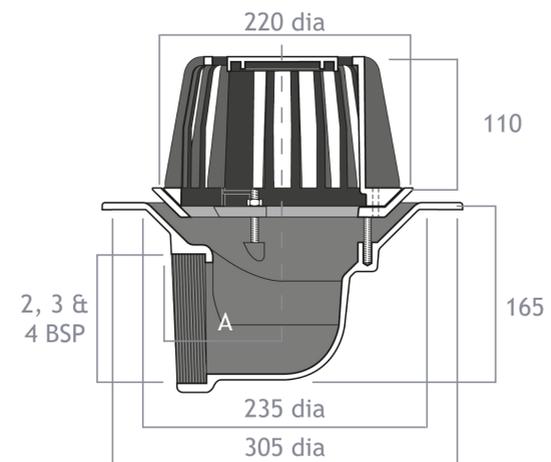
## Horizontal Threaded Outlet - Domical Grate

PL CI

Outlet Size (BSP)	A (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Spec Code
2" *	105	1.69	9.0	WX/WB233
3" *	105	4.97	8.2	WX/WB234

\* Note: 2" & 3" are inclusive of threaded reducer complete with plastic dome grate

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with use of compulsory clamp plate and 35mm head of water



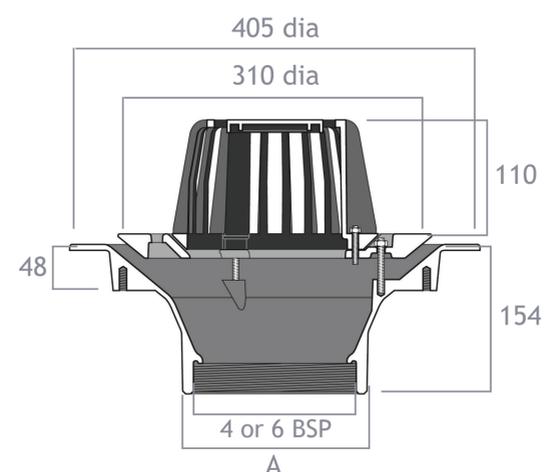
PL CI

## Vertical Threaded Outlet - Domical Grate

Outlet Size (BSP)	A (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Spec Code
4"	186	8.56	16.0	WX/WB414
6"	186	10.35	13.5	WX/WB416

\* Note: 2" & 3" are inclusive of threaded reducer complete with plastic dome grate

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with use of compulsory clamp plate and 35mm head of water



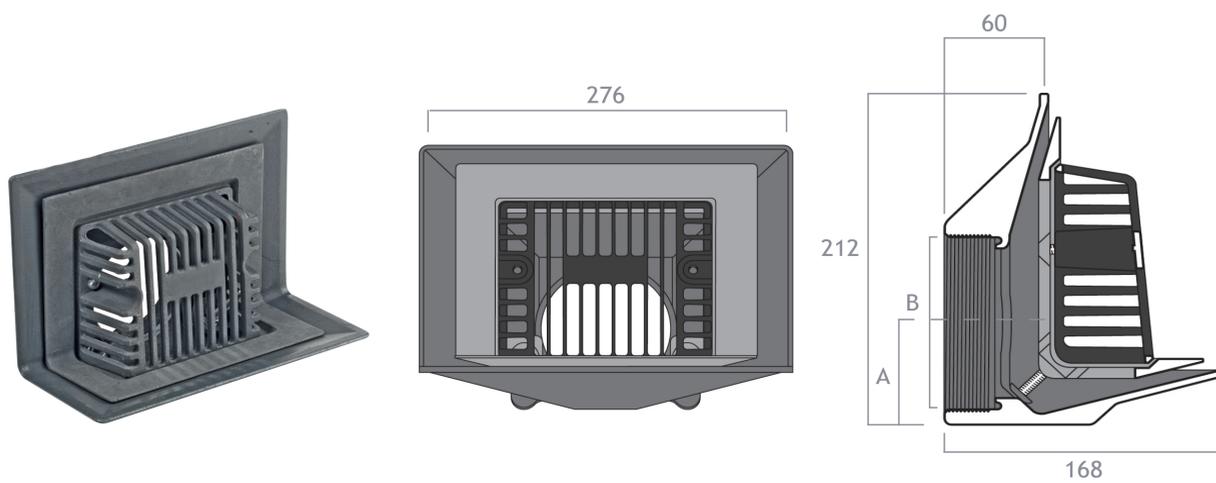
PL CI

# Parapet Outlets - Shallow Sump

## Two-Way Outlet - Rectangular Grate

Outlet Size (mm)	Grate Material	A (mm)	B BSP	Flow Rate <sup>1</sup> (Vertical)	Flow Rate <sup>1</sup> (Horizontal)	Loading Rating	Weight (kg)	Product Code
2	Cast Iron	38	2"	1.4	0.7	K3	5.9	WX/WF022
2	Nickel Bronze	38	2"	1.4	0.7	K3	6.1	WX/WF202
3	Cast Iron	52	3"	2.6	0.8	K3	5.8	WX/WF023
3	Nickel Bronze	52	3"	2.6	0.8	K3	6.0	WX/WF203
4	Cast Iron	65	4"	2.6	0.8	K3	5.7	WX/WF024
4	Nickel Bronze	65	4"	2.6	0.8	K3	5.8	WX/WF204

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with use of compulsory clamp plate and 35mm head of water



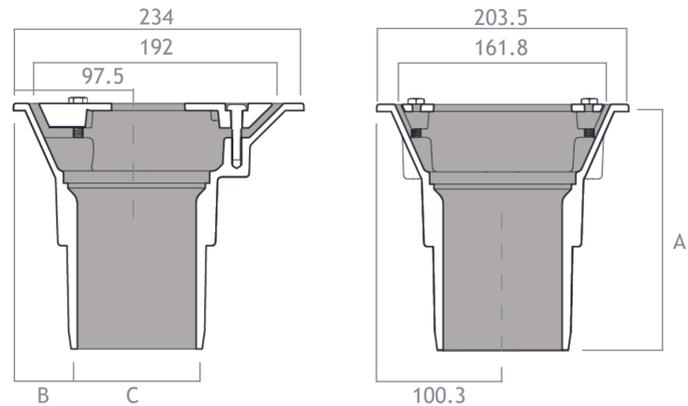
# Balcony Outlets - Shallow Sump

## Vertical Spigot Outlet - Flat Grating

CI

Outlet Size (BSP)	A (mm)	B (mm)	C (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Load Rating	Spec Code
2"	231	69.5	60.0	1.7	8.26	K3	WX/WF602
3"	231	58.0	82.0	5	7.38	K3	WX/WF603
4"	200	44.35	110.0	5.8	6.54	K3	WX/WF604

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with use of compulsory clamp plate and 35mm head of water

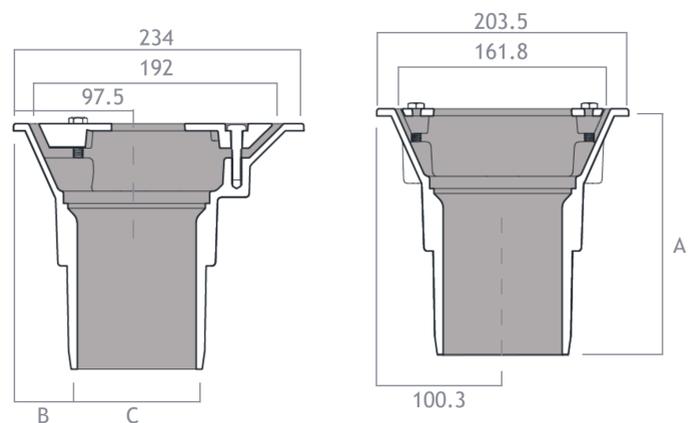


## Vertical Spigot Outlet - Aperture Grating

CI

Outlet Size (BSP)	A (mm)	B (mm)	C (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Load Rating	Spec Code
2"	231	69.5	60.0	1.7	8.12	K3	WX/WF702
3"	231	58.0	82.0	5	7.17	K3	WX/WF703
4"	200	44.35	110.0	5.8	6.40	K3	WX/WF704

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with use of compulsory clamp plate and 35mm head of water

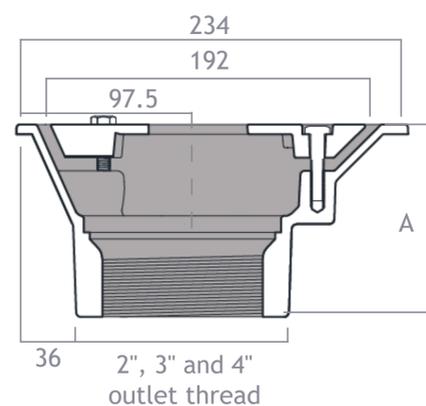


## Vertical Threaded Outlet - Flat Grating

CI

Outlet Size (BSP)	A (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Load Rating	Spec Code
2"	127.3	1.7	6.63	B125	WX/WF622
3"	127.3	5.0	5.81	B125	WX/WF623
4"	127.3	5.8	4.63	B125	WX/WF624

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with use of compulsory clamp plate and 35mm head of water

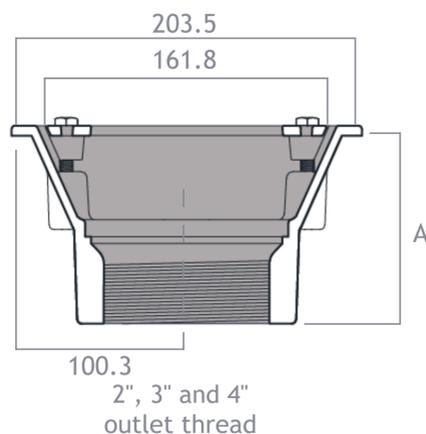


## Vertical Threaded Outlet - Aperture Grate

CI

Outlet Size (BSP)	A (mm)	Flow Rate <sup>1</sup> (l/s)	Weight (kg)	Load Rating	Spec Code
2"	127.3	1.7	6.31	B125	WX/WF722
3"	127.3	5.0	5.49	B125	WX/WF723
4"	127.3	5.8	4.31	B125	WX/WF724

<sup>1</sup>Flow rate: The flow rates relate to maximum sump capacity with use of compulsory clamp plate and 35mm head of water



# Specification - Care & Maintenance

Materials and finish of Wade floor gullies and access covers, described below, are selected to provide lasting performance and to blend with surroundings. The products require the minimum of maintenance, but periodic inspection should be carried out to ensure absence of matter which could impede drainage. Measures set out below will sustain appearance and prolong service life.

## Stainless Steel - Grade 304

SS

Used for bodies, gratings, rodding eyes, filter buckets and fixings.

A corrosion-resistant metal containing significant amounts of nickel and chromium; AISI grade 304 stainless steel is used as standard, which is suitable for general use in and around buildings including most coastal locations.

Clean with soap and warm water rinse and wipe dry. Gratings may also be cleaned in certain dishwashers.

Under no circumstances treat with metal scouring pads, metal scrapers or wire wool as these will contaminate surfaces leaving rust spots.

## Nickel bronze

NB

Used with satin finish for gratings and rodding eyes. A cast alloy with a fine grain effect which blends well with most floor finishes. The satin finish is generally maintained by the slight abrasive action of passing traffic. In unused areas the material will gradually tarnish. To restore lustre, apply a plain nylon scouring pad (not soap-filled) in the direction of the grain. Note: Avoid covering nickel bronze items with plastic sheeting after installation, otherwise blackening may occur.

## Ductile iron

DI

Used only for gratings. A casting with the ductility of steel, yet with more than twice the tensile strength of cast iron.

## Cast iron

CI

Used for bodies, membrane clamping collars, threaded pipework adaptors and accessories such as extensions. A widely used metal in the drainage industry, its resistance to corrosion permits extended use under extreme conditions. Castings are coated with a high grade lacquer paint to provide internal and external surface coverage. Paint will gradually wear off and is replaceable; oxidation (surface rusting) is a natural process which does not weaken the material.

## Polypropylene

PL

Used for the removable trap in stainless steel gullies. Maximum continuous operating temperature of 100°C.

## ABS

PL

Used for bodies, dip tubes, extensions and threaded pipework adaptors. A cost-effective, fire-resistant material, with a maximum continuous operating temperature of 75°C.

## Neoprene

PL

Used for gaskets and seals. Maximum continuous operating temperature of 100°C.

**ADAPTOR**

Component used to connect one item to another.

**APERTURES**

Openings in a GRATING which may be holes or slots.

**BODY**

Bowl-like part of a GULLY, fitted below or in the floor, on which the GRATING is generally fitted and to which pipework is connected; may be trapped or non-trapped.

**CLAMP COLLAR/RING**

See MEMBRANE CLAMPING COLLAR

**CLAMPING DEVICE**

See MEMBRANE CLAMPING COLLAR

**CLEANOUT**

See RODDING EYE

**DAMP-PROOF MEMBRANE (DPM)**

Protective covering generally laid on top of a structural slab in a ground floor to prevent damp from entering the building. When a GULLY is fitted in such a floor, the membrane is dressed on the FLANGE, into the mouth of the BODY, and clamped with a MEMBRANE CLAMPING COLLAR to ensure a watertight joint.

**DIRECT CONNECTION**

Version of BODY/GRATING/COVER, outlet of which is machined to enable direct connection to pipework.

**EXTENSION**

Accessory used to increase the effective height of a GRATING or COVER above a BODY.

**FFL**

FINISHED FLOOR level.

**FINISHED FLOOR**

Floor covered with asphalt, carpet, ceramic tiles, flexible sheet, marble, paviers, resin, terrazzo, vinyl, or wood etc.

**FLANGE**

Part of the BODY leading to the mouth, over which the DAMP-PROOF MEMBRANE is laid.

**FLEXIBLE SHEET**

Flexible watertight finished layer for floors, affixed to the FLANGE by means of a CLAMPING COLLAR; requires GRATINGS and COVERS to suit.

**FLOOR DRAIN**

See GULLY

**FLOW RATE**

Maximum amount of liquid (litres/sec.) that can be drained, at a given head of water. See page 2 Design Considerations.

**GRATE**

See GRATING

**GRATING**

Removable component of a GULLY fitted at floor level; upper surface contains APERTURES to receive waste water; generally fitted in a FRAME; most versions are HEIGHT ADJUSTABLE (VARI-LEVEL or MULTI-LEVEL) and can be increased in height by means of an EXTENSION; versions available for DIRECT CONNECTION to pipework.

**GULLY**

Discharge fitting, the top of which is a GRATING or COVER, capable of installation at floor level, intended to receive waste water either through APERTURES in a GRATING and/or from pipes connected to the BODY of the gully, may be trapped or non-trapped.

**HEIGHT ADJUSTABILITY**

Facility to adjust the height of a GRATING or COVER above the FLANGE to suit floor level.

**I.D.**

Internal diameter.

**O.D.**

Outside diameter.

**OUTLET**

Part of BODY through which waste water is discharged into connecting pipework.

**'P' TRAP**

TRAP with a vertical inlet, and an OUTLET inclined slightly below the horizontal.

**RODDING EYE/POINT**

See RODDING EYE

**'S' TRAP**

TRAP with a vertical inlet and an offset outlet parallel to it.

**SUMP**

Bowl of BODY; large sump enables sudden surges of waste water to be retained, thereby controlling flow through the GULLY.

**THREAD**

Four standard types are used in Wade GULLIES:

**BSP**

(British Standard Pipe) - outlet thread of a BODY, connection to SIDE INLET;

**NPSM**

(National Pipe Straight Mechanical) - thread on GRATINGS allowing easy height adjustment when installed with BODY, MEMBRANE CLAMPING COLLAR, or ADAPTOR; Metric-I.S.O. - thread used for all fixing screws, studs etc.

**THREADED PIPEWORK ADAPTOR**

Converts threaded outlet BODY to a spigot outlet allowing connection to pipework using a proprietary coupling.

**TRAP**

Removable or integral part of a BODY which prevents, by means of a WATER SEAL, the passage of foul air from the outlet to the inlet.

**UNFINISHED FLOOR**

Generally, bare concrete.

**VARI-LEVEL**

Range of gullies comprising various BODIES which accept various GRATINGS and COVERS which are HEIGHT ADJUSTABLE with a fine thread to enable accurate installation at FINISHED FLOOR LEVEL.

**VINYL**

A form of flexible sheet flooring; requires GRATINGS and COVERS to suit.

**WATER SEAL**

Effective height of water (min. 50mm) in a trap which prevents the passage of foul air.



# Quality by Tradition • Performance by Design

Wade & Gatic  
Third Avenue  
Halstead  
Essex  
CO9 2SX  
+44 (0) 1787 475 151  
wadetech@alumascwms.co.uk



All reasonable care has been taken in the preparation of this brochure, all information, recommendation and guidance notes on the use of The Products are made without guarantee since the conditions of use are beyond the control of Alumasc Building Products Limited (The company). The customer is responsible for ensuring that each product is fit for its intended purpose and that conditions are suitable. The information contained in this brochure and advice arising there from is free of charge and accordingly on the terms that no liability nor liability for negligence will be attached to The Company or its servants in relation to any such service arising out of or in connection with this brochure. The Company pursues a policy of constant product development and information contained in this publication is therefore subject to change without notice.