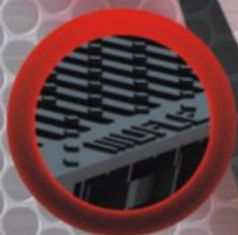


2011

MUFLE
PASSION FORDRAINAGE

MUFLESYSTEM
GENERAL CATALOGUE



SMART

The system:

- it supports 5 load classes (A10, B80, C150, D210, E400) in compliance with Standard AS3996 and EN1433
- it is made up of a HD-PE channel with a strengthening frame
- it is very compact, since the frame is perfectly anchored to the channel body. The frame is made from materials able to resist corrosion due to contact with the surrounding environment and the gratings. The anchoring system was designed to withstand any deformation due to shearing or torsional stress
- it is wearproof and very solid thanks to the frame, which ensures a 2.4 mm-thick drive-over edge and a 1.2 mm - thick contact surface
- since the edge shows the exact dimensions for the paving, easy and accurate installation is ensured
- it comes equipped with a classic tie-rod fixing system and a convenient drain gate, available in two versions (Ø100 and Ø110)
- it is ideal for private car parks, footways, canalisation systems in roads and parking areas, transversal canalisation systems (road crossings) with low-speed vehicular traffic
- it includes models with small sizes (H 55 and H 80) which are perfect for installation into areas subject to depth restrictions.
- it comes complete with drain gullies with siphon
- the range is made up of 9 channels with 3 widths and 5 heights: 100/55, 100/80, 100/100, 100/160, 150/100, 150/160, 200/100, 200/160, 200/250





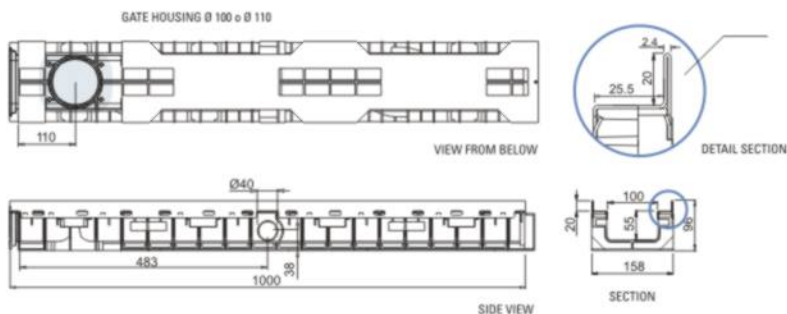
100



CHANNELS

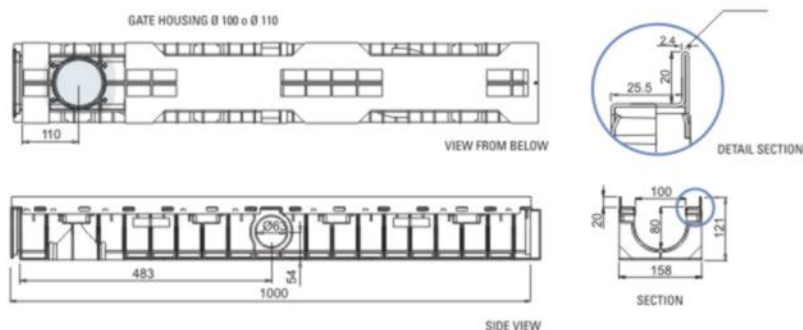


SMART 100



SMART 100/55

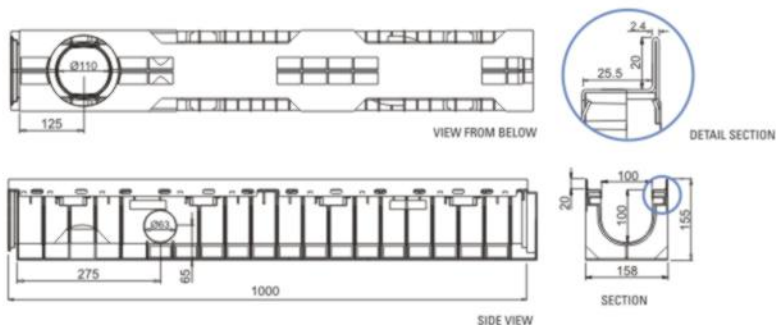
CODE	MATERIAL OF FRAME	MATERIAL OF CHANNEL	EXTERNAL DIMENSIONS L x W x H mm	INTERNAL DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SECTION cm ²	CAPACITY dm ³	PREINSTALLED DRAIN OUTLETS mm
701003	galvanised steel DX51D**	HD-PE	1000 x 158 x 96	1000 x 100 x 55	3.10	54.44	5.44	side 2 x Ø 40
701011	stainless steel AISI 304*							bottom 1 x Ø 100 ; 1 x Ø 110



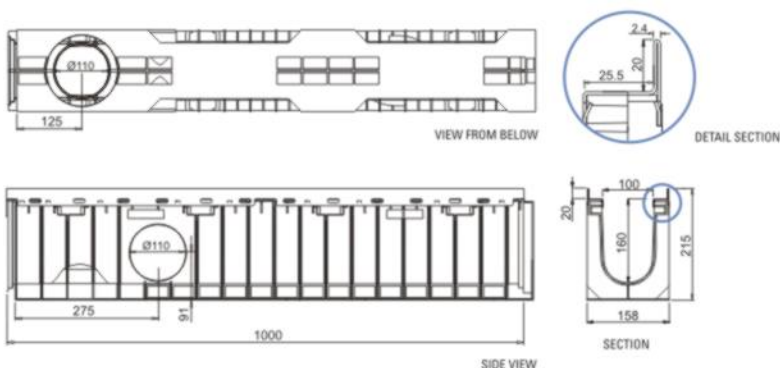
SMART 100/80

CODE	MATERIAL OF FRAME	MATERIAL OF CHANNEL	EXTERNAL DIMENSIONS L x W x H mm	INTERNAL DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SECTION cm ²	CAPACITY dm ³	PREINSTALLED DRAIN OUTLETS mm
701002	galvanised steel DX51D**	HD-PE	1000 x 158 x 121	1000 x 100 x 80	3.30	69.28	6.92	side 2 x Ø 63
701010	stainless steel AISI 304*							bottom 1 x Ø 100 ; 1 x Ø 110

§ Waterproofing: in order to ensure the channels are waterproof, a bituminous adhesive sealant should be used. Heat-sealing the channel joints makes sure there will be no leakages through said joints. For further information please contact Mufle's Technical Department.
N.B. Sizes and weights are subject to usual manufacturing tolerance values.



SMART 100/100									
CODE	MATERIAL OF FRAME	MATERIAL OF CHANNEL	EXTERNAL DIMENSIONS L x W x H mm	INTERNAL DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SECTION cm ²	CAPACITY dm ³	PREINSTALLED DRAIN OUTLET	
701001	galvanised steel DX51D**	HD-PE	1000 x 158 x 155	1000 x 100 x 100	3.60	89.56	8.95	side	2 x Ø63
701009	stainless steel AISI 304*							bottom	1 x Ø110



SMART 100/160									
CODE	MATERIAL OF FRAME	MATERIAL OF CHANNEL	EXTERNAL DIMENSIONS L x W x H mm	INTERNAL DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SECTION cm ²	CAPACITY dm ³	PREINSTALLED DRAIN OUTLETS	
701000	galvanised steel DX51D**	HD-PE	1000 x 158 x 215	1000 x 100 x 160	4.10	145.28	14.52	side	2 x Ø110
701008	stainless steel AISI 304*							bottom	1 x Ø110

§ Waterproofing: in order to ensure the channels are waterproof, a bituminous adhesive sealant should be used. Heat-sealing the channel joints makes sure there will be no leakages through said joints. For further information please contact Mufle's Technical Department.

N.B. Sizes and weights are subject to usual manufacturing tolerance values.

APPLICATIONS OF STAINLESS

Green areas and parks
Pedestrian areas and/or cycle lanes
Sports facilities
Terraces
Hospital kitchens, restaurants and similar facilities

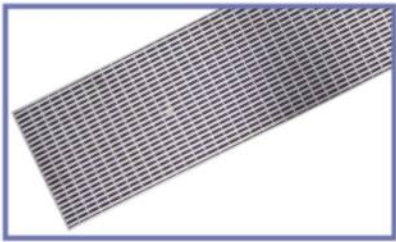
APPLICATIONS OF GALVANISED STEEL

Pavements
Lay-bys and private car parks

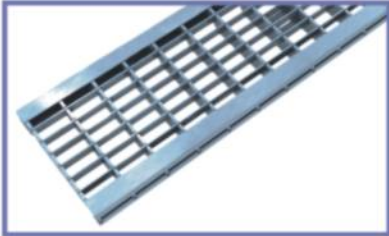
APPLICATIONS OF DUCTILE IRON

Kerbs
Historical town centres (slow traffic)
Parking areas
Parking decks

HEELGUARD GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
999999	A10	stainless steel wedgewire AISI 304* or 316*	998 x 148 x 20	4.30	8.82	7 x 21	
999986	A10	galvanised steel wedgewire	998 x 148 x 20	4.40	8.82	7 x 21	
999997	B80	stainless steel wedgewire AISI 304* or 316*	998 x 148 x 20	5.80	8.82	7 x 21	
999985	B80	galvanised steel wedgewire	998 x 148 x 20	6	8.82	7 x 21	

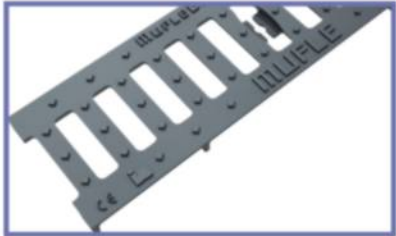
ANTI-HEEL MESH GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x Wx H mm	WEIGHT kg	DRAINAGE SURFACE dm²	OPENINGS mm	
502126	B80	hot dip galvanised steel DD11 (1.0332)**	998 x 148 x 20	3.60	8.82	10.2 x 32.2	
502150	B80	pickled stainless steel AISI 304*					
502138	C150	hot dip galvanised steel DD11 (1.0332)**	998 x 148 x 20	3.60	8.82		
502162	C150	pickled stainless steel AISI 304*					
502152	D210	hot dip galvanised steel DD11 (1.0332)**	998 x 148 x 20	5.10	8.82	10.2 x 32.2	
502175	D210	pickled stainless steel AISI 304*					

GRATINGS

SMART 100

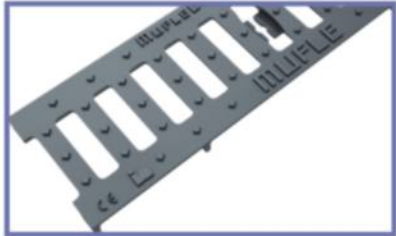
SLOTTED GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
502113	D210	GJS 500/7* ductile iron water based paint coated	498 x 148 x 20	3.60	1.97	82.0 x 20.0	

HEELGUARD GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
502114	D210	GJS 500/7* ductile iron water based paint coated	498 x 148 x 20	4.00	2.10	91.5 x 6.0	

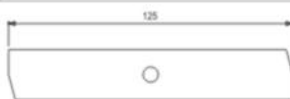
SLOTTED GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
502116	E400	GJS 500/7* ductile iron water based paint coated	498 x 148 x 20	4.50	1.97	82.0 x 20.0	



END CAPS

CODE	TYPE	MATERIAL	VALID FOR CHANNELS	PREINSTALLED DRAINS mm
700500	end-cap with drain	HD-PE	100/55	1 x Ø 40
700508	closed end-cap	HD-PE	100/55	-
700501	end-cap with drain	HD-PE	100/80	1 x Ø 63
700509	closed end-cap	HD-PE	100/80	-
700502	end-cap with drain	HD-PE	100/100	1 x Ø 63
700510	closed end-cap	HD-PE	100/100	-
700503	end-cap with drain	HD-PE	100/160	1 x Ø 63
700511	closed end-cap	HD-PE	100/160	-



VIEW FROM ABOVE



SIDE VIEW



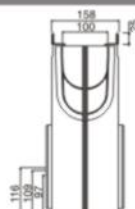
KIT TIE-ROD + SCREWS

CODE	MATERIAL	VALID FOR GRATINGS	SCREW	KIT FOR 1 ml
500421	galvanised steel	SMART galvanised steel	M8 x 55 TBL combi	2 tie-rods + 2 screws
500422	stainless steel	SMART stainless steel	M8 x 55 TBL combi stainless steel	2 tie-rods + 2 screws
500423	black galvanised steel	SMART ductile iron	M8 x 55 black with hexagonal head	2 tie-rods + 2 screws

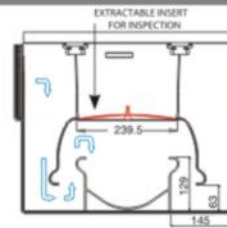
DRAIN BOX WITH SYPHON



FRONT VIEW



SIDE VIEW



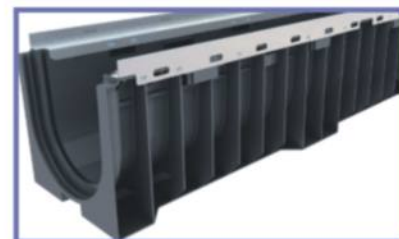
SECTION

SMART 100

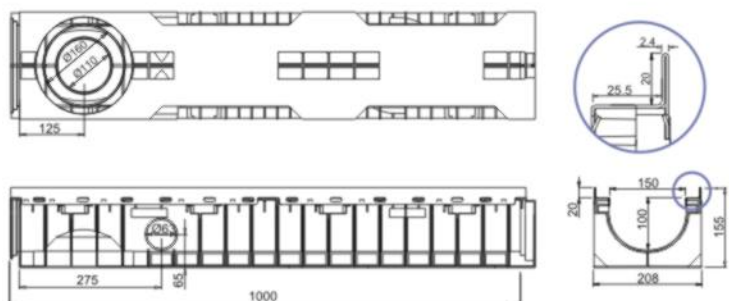
CODE	MATERIAL OF FRAME	MATERIAL OF OUTLET	DIMENSIONS L x l x h mm	INTERNAL DIMENSIONS L x l x h mm	MAXIMUM LARGE mm	HEIGHT OF OUTLETS mm	WEIGHT kg	PREINSTALLED DRAIN OUTLETS mm
701016	galvanised steel DX51D**	HD-PE	524 x 158 x 434	500 x 100 x 400	185	116 - 109 - 97	3.35	2 x Ø 110; 2 x Ø 160; 2 x Ø 200
701019	stainless steel AISI 304**	HD-PE	524 x 158 x 434	500 x 100 x 400	185	116 - 109 - 97	3.35	2 x Ø 110; 2 x Ø 160; 2 x Ø 200



150



SMART 150/160								
CODE	MATERIAL OF FRAME	MATERIAL OF CHANNEL	DIMENSIONS L x W x H mm	INTERNAL DIMENSIONS L x W x h mm	WEIGHT kg	DRAINAGE SECTION cm²	CAPACITY dm³	PREINSTALLED DRAIN OUTLET mm
701004	galvanised steel DX51D**	HD-PE	1000 x 208 x 215	1000 x 150 x 160	4.55	213.04	21.30	side 2 x Ø 110
701012	stainless steel AISI 304*							bottom 1 x Ø 110 ; 1 x Ø 160



SMART 150/100								
CODE	MATERIAL OF FRAME	MATERIAL OF CHANNEL	DIMENSIONS L x W x H	INTERNAL DIMENSIONS L x W x h	WEIGHT	DRAINAGE SECTION	CAPACITY	PREINSTALLED DRAIN OUTLET
			mm	mm	kg	cm²	dm³	mm
701004	galvanised steel DX51D**	HD-PE	1000 x 208 x 155	1000 x 150 x 100	4.00	127.32	12.73	side 2 x Ø 63
701012	stainless steel AISI 304*							bottom 1 x Ø 110; 1 x Ø 160

N.B. Sizes and weights are subject to usual manufacturing tolerance values.



GRATINGS

SMART 150

APPLICATIONS OF STAINLESS STEEL

Green areas and parks
Pedestrian areas and/or cycle lanes
Sports facilities
Terraces
Hospital kitchens, restaurants and similar facilities

APPLICATIONS OF GALVANISED STEEL

Pavements
Lay-bys and private car parks

APPLICATIONS OF DUCTILE IRON

Kerbs
Historical town centres (slow traffic)
Parking areas
Parking decks

HEELGUARD GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
999983	A10	stainless steel wedgewire AISI 304* or 316*	998 x 198 x 20	7.20	13.08	7 x 21	
999980	A10	galvanised steel wedgewire	998 x 198 x 20	7.40	13.08	7 x 21	
999982	B80	stainless steel wedgewire AISI 304* or 316*	998 x 198 x 20	8	13.08	7 x 21	
999979	B80	galvanised steel wedgewire	998 x 198 x 20	8.20	13.08	7 x 21	

ANTI-HEEL MESH GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x Wx H mm	WEIGHT kg	DRAINAGE SURFACE dm²	OPENINGS mm	
502130	B80	hot dip galvanised steel DD11 (1.0332)**	998 x 198 x 20	5	7.70	10.2 x 32.2	
502158	B80	pickled stainless steel AISI 304*					
502154	D210	hot dip galvanised steel DD11 (1.0332)**	998 x 198 x 20	7.50	6.54		
502177	D210	pickled stainless steel AISI 304*					

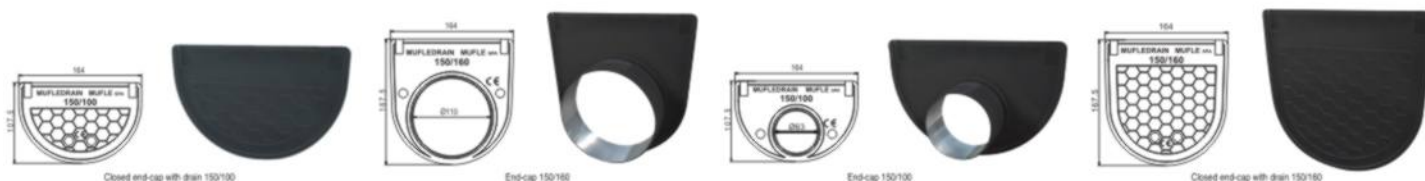


GRATINGS

SMART 150

SLOTTED GRATING							
CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x Wx H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
502120	D210	GJS 500/7* ductile iron water based paint coated	498 x 198 x 20	5.20	3.16	132.0 x 20.0	

HEELGUARD GRATING							
CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x Wx H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
502196	D210	GJS 500/7* ductile iron water based paint coated	498 x 198 x 20	5.90	3.16	132.0 x 6.0	



END CAPS

CODE	TYPE	MATERIAL	VALID FOR CHANNELS	PREINSTALLED DRAINS mm
700504	end-cap with drain	HD-PE	150/100	1 x Ø 63
700512	closed end-cap	HD-PE	150/100	-
700505	end-cap with drain	HD-PE	150/160	1 x Ø 110
700513	closed end-cap	HD-PE	150/160	-



VIEW FROM ABOVE



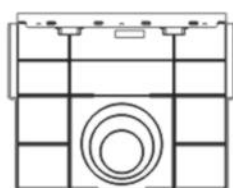
SIDE VIEW



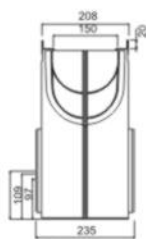
KIT TIE-ROD + SCREWS

CODE	MATERIAL	VALID FOR GRATINGS	SCREW	KIT FOR 1 m
500424	galvanised steel	SMART galvanised steel	M8 x 55 TBL combi	2 tie-rods + 2 screws
500425	stainless steel	SMART stainless steel	M8 x 55 TBL combi	2 tie-rods + 2 screws
500426	black galvanised steel	SMART ductile iron	M8 x 55 black with hexagonal head	2 tie-rods + 2 screws

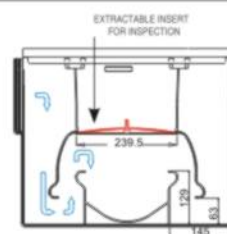
DRAIN BOX WITH SYPHON



FRONT VIEW



SIDE VIEW



SECTION

SMART 150

CODE	MATERIAL OF FRAME	MATERIAL OF OUTLET	EXTERNAL DIMENSIONS L x W x H mm	INTERNAL DIMENSIONS L x W x H mm	MAXIMUM LARGE mm	HEIGHT OF OUTLETS mm	WEIGHT kg	PREINSTALLED DRAIN OUTLETS mm
701017	galvanised steel DX51D**	HD-PE	542 x 208 x 427	500 x 100 x 400	185	116 - 109 - 97	3.70	2 x Ø 110; 2 x Ø 160; 2 x Ø 200
701020	stainless steel AISI 304*	HD-PE	542 x 208 x 427	500 x 100 x 400	185	116 - 109 - 97	3.70	2 x Ø 110; 2 x Ø 160; 2 x Ø 200



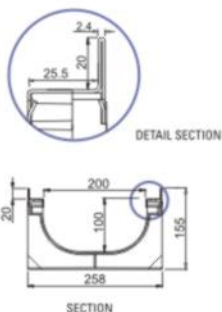
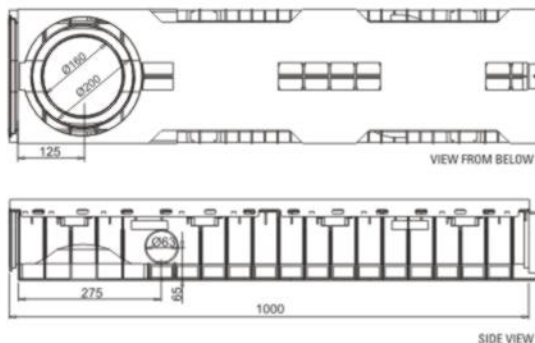
200



CHANNELS

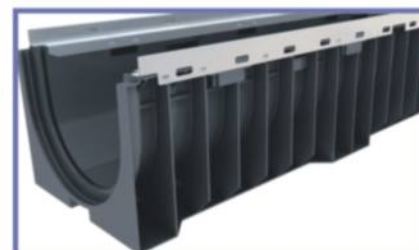
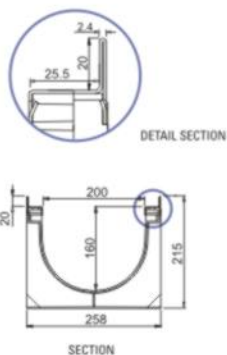
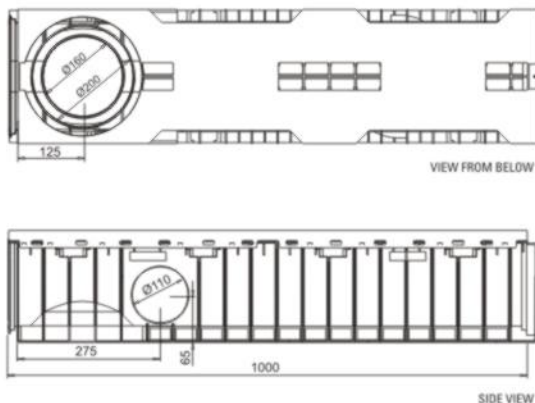


SMART 200



SMART 200/100

CODE	MATERIAL OF FRAME	MATERIAL OF CHANNEL	DIMENSIONS L x W x H mm	INTERNAL DIMENSIONS L x l x h mm	WEIGHT kg	DRAINAGE SECTION cm ²	CAPACITY dm ³	PREINSTALLED DRAIN OUTLET
701007	galvanised steel DX51D**	HD-PE	1000 x 258 x 155	1000 x 200 x 100	4.35	178.73	17.87	side 2 x Ø 63
701015	stainless steel AISI 304*							bottom 1 x Ø 160 ; 1 x Ø 200



SMART 200/160

CODE	MATERIAL OF FRAME	MATERIAL OF CHANNEL	DIMENSIONS L x W x H mm	INTERNAL DIMENSIONS L x l x h mm	WEIGHT kg	DRAINAGE SECTION cm ²	CAPACITY dm ³	PREINSTALLED DRAIN OUTLET mm
701006	galvanised steel DX51D**	HD-PE	1000 x 258 x 215	1000 x 200 x 160	4.95	275.87	27.58	side 2 x Ø 110
701014	stainless steel AISI 304*							bottom 1 x Ø 160 ; 1 x Ø 200

§ Waterproofing: in order to ensure the channels are waterproof, a bituminous adhesive sealant should be used. Heat-sealing the channel joints makes sure there will be no leakages through said joints. For further information please contact Mufle's Technical Department.

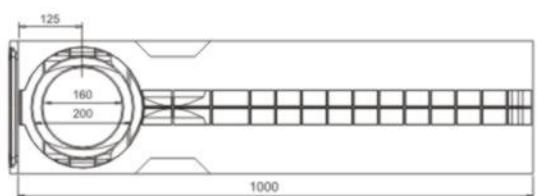
N.B. Sizes and weights are subject to usual manufacturing tolerance values.



CHANNELS



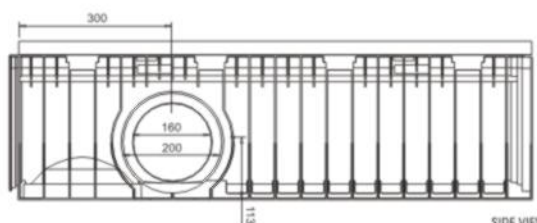
SMART 200



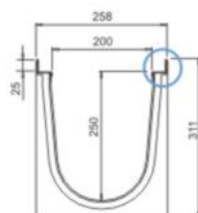
VIEW FROM BELOW



DETAIL SECTION



SIDE VIEW



SECTION



SMART 200/250

CODE	MATERIAL OF FRAME	MATERIAL OF CHANNEL	DIMENSIONS L x W x H mm	INTERNAL DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SECTION cm ²	CAPACITY dm ³	PREINSTALLED DRAIN OUTLET mm
701022	galvanised steel DX51D**	HD-PE	1000 x 258 x 311	1000 x 200 x 250	7.50	430	43	side 2 x Ø 200
701023	stainless steel AISI 304*							bottom 2 x Ø 160 ; 1 x Ø 200

§ Waterproofing: in order to ensure the channels are waterproof, a bituminous adhesive sealant should be used. Heat-sealing the channel joints makes sure there will be no leakages through said joints. For further information please contact Mufle's Technical Department.

N.B. Sizes and weights are subject to usual manufacturing tolerance values.



GRATINGS

SMART 200

APPLICATIONS OF STAINLESS STEEL

Green areas and parks
Pedestrian areas and/or cycle lanes
Sports facilities
Terraces
Hospital kitchens, restaurants and similar facilities

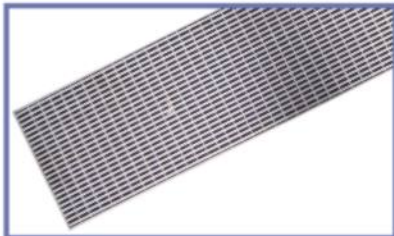
APPLICATIONS OF GALVANISED STEEL

Pavements
Lay-bys and private car parks

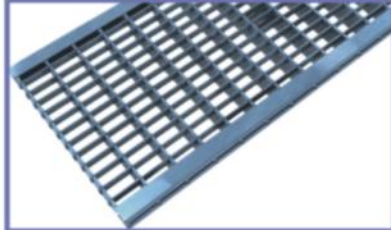
APPLICATIONS OF DUCTILE IRON

Kerbs
Historical town centres (slow traffic)
Parking areas
Parking decks

HEELGUARD GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
999998	A10	stainless steel wedgewire AISI 304* or 316*	998 x 248 x 20	9	16.98	7 x 21	
999977	A10	galvanised steel wedgewire	998 x 248 x 20	9.10	16.98	7 x 21	
999995	B80	stainless steel wedgewire AISI 304* or 316*	998 x 248 x 20	10.30	16.98	7 x 21	
999976	B80	galvanised steel wedgewire	998 x 248 x 20	10.40	16.98	7 x 21	

ANTI-HEEL MESH GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x Wx H	WEIGHT	DRAINAGE SURFACE	OPENINGS	
			mm	kg	dm²	mm	
502134	B80	hot dip galvanised steel DD11 (1.0332)**	998 x 248 x 20	6.20	16.98	10.2 x 32.2	
502160	B80	pickled stainless steel AISI 304*					
502156	D210	hot dip galvanised steel DD11 (1.0332)**	998 x 248 x 20	9.50	16.98	10.2 x 32.2	
502179	D210	pickled stainless steel AISI 304*					

SLOTTED GRATING

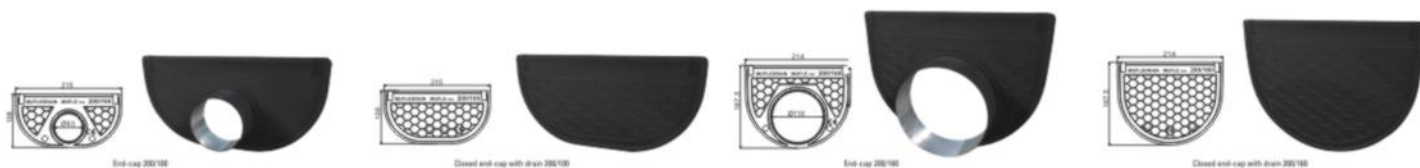
CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
502124	D210	GJS 500/7* ductile iron water based paint coated	498 x 248 x 20	7.00	4.32	180.0 x 20.0	

SLOTTED GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
502125	E400	GJS 500/7* ductile iron water based paint coated	498 x 248 x 20	7.70	4.32	180.0 x 20.0	

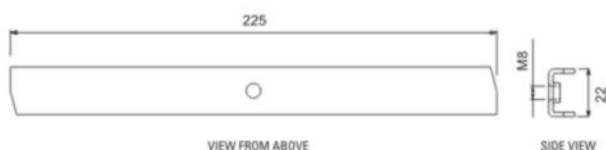
HEELGUARD GRATING

CODE	LOAD CLASS	MATERIAL	DIMENSIONS L x W x H mm	WEIGHT kg	DRAINAGE SURFACE dm ²	OPENINGS mm	
502195	D210	GJS 500/7* ductile iron water based paint coated	498 x 248 x 20	7.70	2.10	91.5 x 6.0	



END CAPS

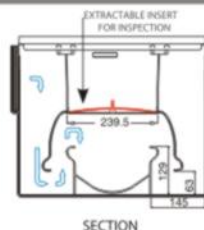
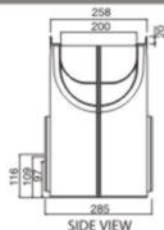
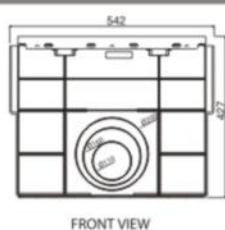
CODE	TYPE	MATERIAL	VALID FOR CHANNELS	PREINSTALLED DRAINS mm
700506	end-cap with drain	HD-PE	200/100	1 x Ø 63
700514	closed end-cap	HD-PE	200/100	-
700507	end-cap with drain	HD-PE	200/160	1 x Ø 110
700515	closed end-cap	HD-PE	200/160	-



KIT TIE-ROD + SCREWS

CODE	MATERIAL	VALID FOR GRATINGS	SCREW	KIT FOR 1 m
500427	galvanised steel	SMART galvanised steel	M8 x 55 TBL combi	2 tie-rods + 2 screws
500428	stainless steel	SMART stainless steel	M8 x 55 TBL combi	2 tie-rods + 2 screws
500429	black galvanised steel	SMART ductile iron	M8 x 55 black with hexagonal head	2 tie-rods + 2 screws

DRAIN BOX WITH SYPHON



SMART 200

CODE	MATERIAL OF FRAME	MATERIAL OF OUTLET	EXTERNAL DIMENSIONS L x l x h mm	INTERNAL DIMENSIONS L x l x h mm	MAXIMUM LARGE mm	HEIGHT OF OUTLETS mm	WEIGHT kg	PREINSTALLED DRAIN OUTLETS mm
701018	galvanised steel DX51D**	HD-PE	542 x 258 x 427	500 x 200 x 400	285	116 - 109 - 97	3.85	2 x Ø 110; 2 x Ø 160; 2 x Ø 200
701021	stainless steel AISI 304*	HD-PE	542 x 258 x 427	500 x 200 x 400	285	116 - 109 - 97	3.85	2 x Ø 110; 2 x Ø 160; 2 x Ø 200



SPECIFICATIONS

SMART

1. Supply and installation of MufleDrain SMART type HD-PE drainage channel with external stiffening ribs and male-female coupling system allowing the assembly between one channel and the next with the relevant pre-assembled gratings. The channel will have the following dimensions: length 1,000 mm, internal net gap ____mm, internal height ____mm.
2. Supply and installation of slotted ductile cast-iron GJS 500/7 covering gratings for MufleDrain SMART drainage channels with bar fixing system, load class D210 according to AS3996, slot width 20 mm, length 498 mm, width ____mm.
3. Supply and installation of heelguard ductile cast-iron GJS 500/7 covering gratings for MufleDrain SMART drainage channels with bar fixing system, load class D210 according to AS3996, slot inclined 30° to the longitudinal axis, length 498 mm, with ____mm.
4. Supply and installation of slotted ductile cast-iron GJS500/7 covering gratings with mesh for MufleDrain SMART drainage channels with bar fixing system, load class E400 according to AS3996, length 498mm, width ____mm.
5. Supply and installation of stainless (galvanised) steel heelguard grating for MufleDrain SMART drainage channels with bar fixing system, load classes A10, B80 according to AS3996, length 998mm, width ____mm. A similar grating will be available upon request with length 498mm.
6. Supply and installation of galvanised (stainless) steel anti-heel gratings for MufleDrain SMART drainage channels equipped with screw fixing slots and bar fixing plate, load classes B80, C150 or D210 according to AS3996, length 998 mm, width ____mm. A similar grating will be available upon request with length 498 mm.
7. Supply and installation of HD-PE end caps for MufleDrain drainage channel with coupling system into the special channel housing.

MLFLE

Perth Depot

46 Ledger Road
Balcatta, Perth
Western Australia, 6021
Ph: (08) 9240 6170
Fax: (08) 9240 6175
E-mail: sales@burdens.net.au

ISO 9001:2000 Certified Company



Queensland Depot

3505 Pacific Highway
Slacks Creek
Queensland, 4127
Ph: (07) 3290 6121
Fax: (07) 3290 5486
E-mail : qldsales@burdens.net.au