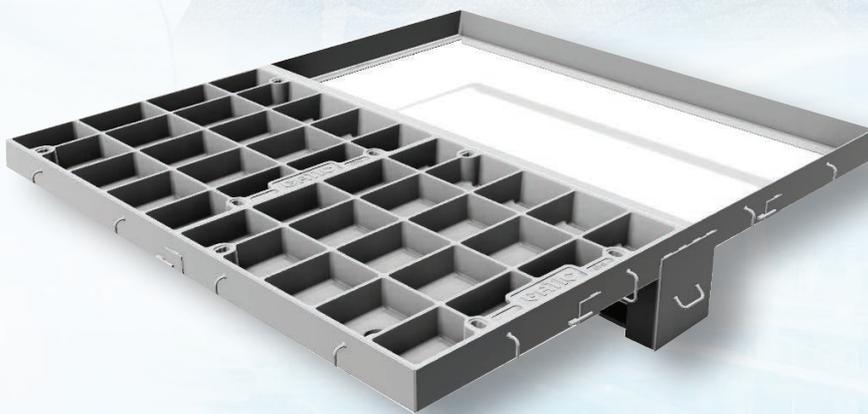


GATIC

DRAINAGE & ACCESS COVERS



Gatic Coex
Technical Brochure

ALUMASC

WATER MANAGEMENT SOLUTIONS





Rain to drain solutions that set the standard for urban water management

Alumasc is a UK-based supplier of premium building products. The majority of the group’s business is in the area of sustainable building products which enable customers to manage energy and water use in the built environment.

Alumasc Water Management Solutions provide ‘Rain to Drain’ solutions, that set the standard for urban water management. They include: **Skyline** Fascias, Soffit & Copings; **Alumasc Rainwater** Gutters & Downpipes; **Harmer** Building Drainage; **Wade** Building Drainage and **Gatic** Drainage & Engineered Access Covers.

Under the AWMS banner, customers benefit from rainwater and drainage products that capture, retain and control the flow of rainwater in the most effective way inside and outside buildings.

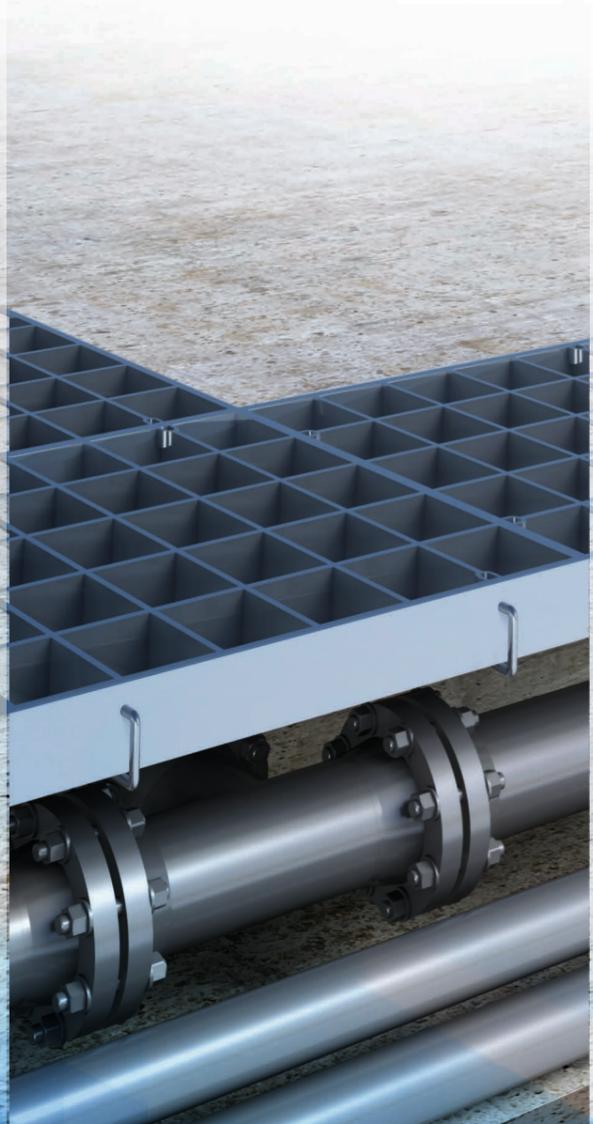


www.alumascwms.co.uk

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Gatic COEX is a comprehensive system of single, duct and multi span access covers and frames for use in slow moving traffic situations, where chequer plate, deep steel recessed or concrete slabs might otherwise be installed and a sealing facility is not required. COEX offers the versatility of a galvanised steel frame combined with the rigidity and durability of ductile iron covers. This enables shallower covers to be used which are therefore lighter than deep steel or concrete slabs. Thus offering a competitively priced long-term solution to protecting cables, pipes and underground equipment.



Cover types

Covers are recessed for concrete infill or solid top according to specifier preference.

Concrete infill recessed covers

Recessed covers are designed for filling with concrete as specified in BS EN 124 - C45 - 45 N/mm² for a test cube of 150mm, or a 40N/mm² for a test cylinder 150mm diameter x 300mm high, using a 10mm coarse aggregate.

Anti-slip surface covers

Concrete infill covers provide a non-slip surface similar to the surrounding areas. Solid top covers incorporate a raised lozenge pattern on the surface.

Materials

The components of COEX covers are manufactured from the following materials:

Ductile iron components to BS EN 1563

Side frames and structural steel sections (removable beams) to BS EN10365

Non-rocking

Correctly installed, COEX covers will be non-rocking under slow moving traffic.

Easy removal/replacement

The machined underside seating face of COEX covers allows the sliding out of covers for easy removal or replacement.

Operator control

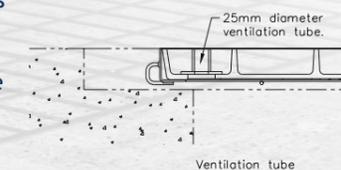
Jack screw operating keys locate positively and securely into COEX, allowing the operator maximum control during operation.

Ventilation

Ventilation can be provided by fitting four 25mm diameter ventilation tubes in recessed covers.

Closed keyways

COEX cover keyways are closed and fitted with plastic plugs to prevent the ingress of dirt.



Loadings

All COEX covers will withstand test load and maximum permanent set criteria specified in BS EN 124 for each loading category. Recessed covers are tested in their as service condition.

Secure support

The clear opening width between supporting frames are at least 7mm greater than the pit/chamber design to allow for minor deviations in pit construction dimensions.

Beam wallbox

Supporting beams in COEX Multispan units are easily removed with appropriate lifting equipment for access to the total chamber area. Beam wallboxes do not project into the chamber opening.

Finishes

Covers are coated with a black bituminous solution that acts as a temporary protection during transit, Removable supporting steelwork and side frames are galvanised to BS EN ISO 1461

Installation

Consignments of COEX units are accompanied by comprehensive installation instructions.

Environmental commitment

Responsibility towards the environment is our primary concern. Our customers often now demand products that are made from recycled and recyclable materials, supplied by companies with robust environmental policies to reduce the environmental impact of their projects for future generations.

Gatic services

Gatic offers a full support service to specifiers and contractors, including Computer Aided Design. AutoCAD compatible details of all Gatic products are available. Please consult our technical department for assistance.

In view of our commitment to product improvement, we reserve the right to alter designs without notice. Design changes will not adversely affect the performance or loading capability of our products.



Medium Duty Single Covers and Frames

Suitable for 5 tonne slow moving pneumatic wheel load. Cover test load - 250kN

Recessed Top Covers

Pit clear opening sizes L x S	Cover type
750 x 300	CDLF
600 x 450	CRRF
750 x 450	CRRF
600 x 600	CDLF
750 x 600	CDLF
900 x 600	CDLF
750 x 750	CDLF
900 x 750	CDLF
900 x 900	CDLF
600 x 1050	CDM
750 x 1050	CDM
1000 x 1050	CDM
600 x 1200	CDM
750 x 1200	CDM



Recessed Top Cover
Type CDM, CDLF or CRRF



Solid Top Cover
Type CDLS, CRSD

Solid Top Covers

Pit clear opening sizes L x S	Cover type
600 x 600	CDLS
750 x 600	CDLS
900 x 600	CDLS
750 x 750	CDLS
900 x 750	CDLS
900 x 900	CDLS
600 x 1200	CRSD
750 x 1200	CRSD
1000 x 1000	CRSD

Duct & Trench Covers and Frames

Suitable for 5 tonne slow moving pneumatic wheel load. Cover test load - 250kN

Recessed Top Covers

Pit clear opening spans	Cover type
300	CDLF
450	CDLF
600	CDLF
750	CDLF
900	CDLF
1050	CDM
1200	CDM
1500	CDM/F



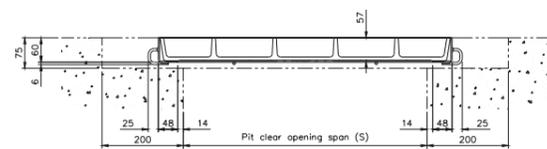
Recessed Top Covers
Type CDLF / CDM or CDM/F

Solid Top Covers

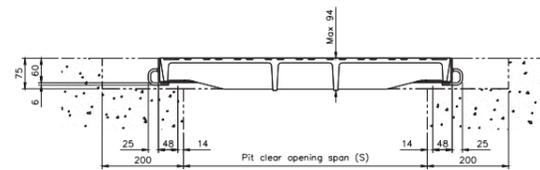
Pit clear opening spans	Cover type
600	CDLS
750	CDLS
900	CDLS
1200	CRSD



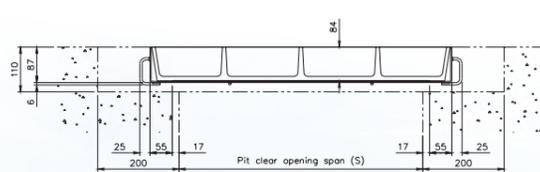
Solid Top Covers
Type CDLS or CRSD



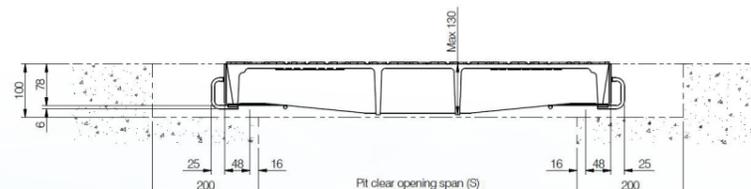
Type CDLF



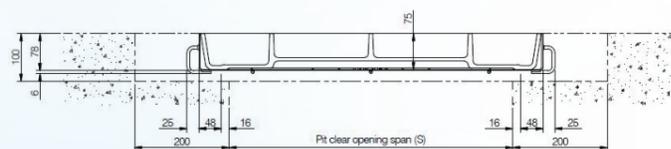
Type CDLS



Type CDM



Type CRSD



Type CRRD & CRRF

Recessed Covers

Recessed covers can be supplied to cover ducts or trenches as straight runs or as complex layouts.

Pit clear opening spans	Cover type	Standard Pit clear opening length											
		1300	1450	1600	1750	1900	2000	2150	2300	2450	2600	2700	2750
300	CDLF	*	*	2	*	*	*	*	*	3	*	*	*
450	CRRF	2	2	2	*	*	3	3	3	3	*	4	*
600	CRRD	2	2	2	2	2	3	3	3	3	3	4	3
750	CRRD	2	2	2	2	2	3	3	3	3	3	4	3
900	CRRD	2	2	2	2	2	3	3	3	3	3	4	3
1050	CDM	2	2	2	*	*	3	3	3	3	*	4	*
1200	CDM	2	2	2	*	*	3	3	3	3	*	4	*
1500	CDM/F	2	2	2	*	*	3	3	3	3	*	4	*

Solid Top Covers

Solid top covers are usually supplied in straight runs.

Pit clear opening spans	Cover type	Standard Pit clear opening length											
		1300	1450	1600	1750	1900	2000	2150	2300	2450	2600	2700	2750
600	CDLS	2	2	2	2	2	3	3	3	3	3	4	3
750	CDLS	2	2	2	2	2	3	3	3	3	3	4	3
900	CDLS	2	2	2	2	2	3	3	3	3	3	4	3
1200	CRSD	2	2	2	*	*	3	3	3	3	*	4	*

*Indicates standard sizes not available - The number shown indicates the quantity of cover parts - Other standard sizes may be available, refer to our technical department.



Medium Duty

Multispan covers and frames

Suitable for 5 tonne slow moving pneumatic wheel load. Cover test load - 250kN

Specification

Below is sample specification information and notes for Multispan recessed or Solid Top covers and frames.

Loading group Gatic C250

5 tonne wheel load - test load 250 kN.

Materials

Covers: Ductile iron components to BS EN 1563.
Structural steel removable beams to BS EN10365.
Frame bars mild steel to BS EN 10025



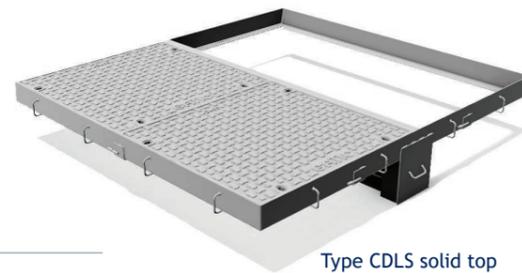
Type CDLF recessed

Finishes

Covers coated with black bituminous solution for protection during transit.
Removable supporting steelwork and side frames galvanised to BS EN ISO 1461.

Infill and surround concrete by customer

Concrete strength, using 10mm coarse aggregate, to be:
45N/mm² for a test cube of 150mm or
40N/mm² for a test cylinder of 150mm diameter x 300mm high.



Type CDLS solid top

Installation

In accordance with instructions supplied by Gatic.

To specify use size and description format as follows:

COEX Multispan Recessed covers and frames Cover type CDLF recessed
Multiple access covers recessed for concrete infill with removable beams.

.... in no. (length) x (span) mm pit clear opening multi span cover and frame.

COEX Type CDLF Ductile Iron Recessed Cover in parts complete with

.... in no. x mm galvanised removable support beam spanning the (length) mm way.

Suitable for Loading Group C250 - Medium Duty 5 Tonnes Wheel Load (pneumatic tyre).

COEX Multispan Solid Top covers and frames Cover type CDLS solid top
Multiple solid top access covers with removable beams.

.... in no. (length) x (span) mm pit clear opening multi span cover and frame.

COEX Type CDLS Ductile Iron Solid Top Cover in parts complete with

.... in no. x mm galvanised removable support beam spanning the (length) mm way.

Suitable for Loading Group C250 - Medium Duty 5 Tonnes Wheel Load (pneumatic tyre).

Standard pit clear opening sizes are shown on Page 7.

Beam sizes and other dimensions are shown on Pages 8 and 9.

Multispan covers and frames

Product Selection

Refer to the table to identify which cover and beam configuration you require against pit clear opening length (L) and pit clear opening span (S). All dimensions are in millimetres.

Pit clear opening span (S) mm	Pit clear opening length (L) mm												Beam centres mm													
	2 parts				3 parts				4 parts				A	B	C	D	E									
	1200	1350	1500	1650	1800	1900	2050	2200	2350	2500	2650	2800	2600	2750	2900	3050	3200	3350	3500	3650	3800					
2 parts 1 beam	1370	[Diagram]				[Diagram]				[Diagram]				685	685											
	1520	[Diagram]				[Diagram]				[Diagram]				835	685											
	1670	[Diagram]				[Diagram]				[Diagram]				835	835											
	1820	[Diagram]				[Diagram]				[Diagram]				985	835											
	1970	[Diagram]				[Diagram]				[Diagram]				985	985											
3 parts 2 beams	2140	[Diagram]				[Diagram]				[Diagram]				685	770	685										
	2290	[Diagram]				[Diagram]				[Diagram]				685	920	685										
	2440	[Diagram]				[Diagram]				[Diagram]				835	770	835										
	2590	[Diagram]				[Diagram]				[Diagram]				835	920	835										
	2740	[Diagram]				[Diagram]				[Diagram]				835	1070	835										
4 parts 3 beams	2890	[Diagram]				[Diagram]				[Diagram]				985	920	985										
	3040	[Diagram]				[Diagram]				[Diagram]				985	1070	985										
	2910	[Diagram]				[Diagram]				[Diagram]				685	770	770	685									
	3060	[Diagram]				[Diagram]				[Diagram]				835	770	770	685									
	3510	[Diagram]				[Diagram]				[Diagram]				835	770	770	835									
5 parts 4 beams	3360	[Diagram]				[Diagram]				[Diagram]				835	920	920	685									
	3510	[Diagram]				[Diagram]				[Diagram]				835	920	920	835									
	3660	[Diagram]				[Diagram]				[Diagram]				985	920	920	835									
	3810	[Diagram]				[Diagram]				[Diagram]				985	920	920	985									
	3960	[Diagram]				[Diagram]				[Diagram]				985	1070	1070	835									
6 parts 3 beams	4110	[Diagram]				[Diagram]				[Diagram]				985	1070	1070	985									
	3680	[Diagram]				[Diagram]				[Diagram]				685	770	770	685									
	3830	[Diagram]				[Diagram]				[Diagram]				685	770	920	770	685								
	3980	[Diagram]				[Diagram]				[Diagram]				835	770	770	770	835								
	4130	[Diagram]				[Diagram]				[Diagram]				685	920	920	920	685								
	4280	[Diagram]				[Diagram]				[Diagram]				835	920	770	920	835								
	4430	[Diagram]				[Diagram]				[Diagram]				835	920	920	920	835								
	4580	[Diagram]				[Diagram]				[Diagram]				835	920	920	920	835								
	4730	[Diagram]				[Diagram]				[Diagram]				985	920	1070	920	835								
	4880	[Diagram]				[Diagram]				[Diagram]				985	920	920	920	985								
5030	[Diagram]				[Diagram]				[Diagram]				985	1070	920	1070	985									
5180	[Diagram]				[Diagram]				[Diagram]				985	1070	1070	1070	985									

Note: For other pit clear opening sizes please refer to our technical department



Heavy Duty Single Covers and Frames

Suitable for 11.5 tonne slow moving pneumatic wheel load. Cover test load - 400kN

Recessed Top Covers

Pit clear opening sizes L x S	Cover type
750 x 300	CDLF
600 x 450	CRRF
750 x 450	CRRF
600 x 600	CRRD
750 x 600	CRRD
900 x 600	CRRD
750 x 750	CRRD
900 x 750	CRRD
900 x 900	CRRD
600 x 1050	CDM
750 x 1050	CDM
1000 x 1050	CDM
600 x 1200	CDM
750 x 1200	CDM



Recessed Top Covers
Type CDLF, CRRF, CRRD, CDM



Solid Top Covers
Type and CRSD

Solid Top Covers

Pit clear opening sizes L x S	Cover type
600 x 600	CRSD
750 x 600	CRSD
900 x 600	CRSD
750 x 750	CRSD
900 x 750	CRSD
900 x 900	CRSD
600 x 1200	CRSD
750 x 1200	CRSD
1000 x 1000	CRSD

Duct & Trench Covers and Frames

Suitable for 11.5 tonne slow moving pneumatic wheel load. Cover test load - 400kN

Recessed Top Covers

Pit clear opening spans	Cover type
300	CDLF
450	CRRD
750	CRRD
600	CRRD
900	CRRD
1050	CDM
1200	CDM
1500	CDM/F



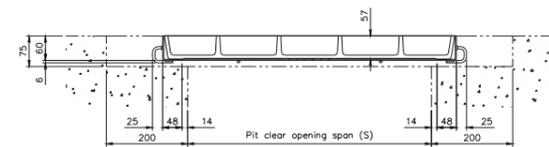
Recessed Top Covers
Type CDLF / CDM / CDM/F / CRRD / CRRF / CDMR

Solid Top Covers

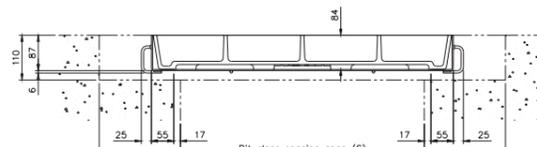
Pit clear opening spans	Cover type
600	CRSD
750	CRSD
900	CRSD
1200	CRSD



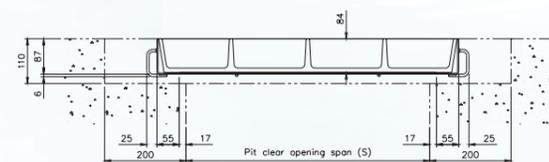
Solid Top Covers
Type CRSD



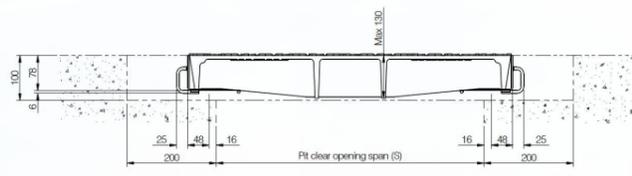
Type CDLF



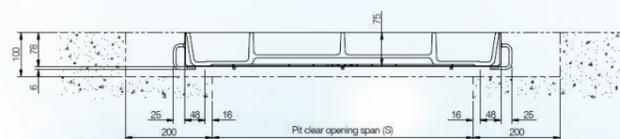
Type CDMR



Type CDM



Type CRSD



Type CRRD & CRRF

Recessed Covers

Recessed covers can be supplied to cover ducts or trenches as straight runs or as complex layouts.

Pit clear opening spans	Cover type	Standard Pit clear opening length											
		1300	1450	1600	1750	1900	2000	2150	2300	2450	2600	2700	2750
300	CDLF	*	*	2	*	*	*	*	*	3	*	*	*
450	CRRF	2	2	2	*	*	3	3	3	3	*	4	*
600	CRRD	2	2	2	2	2	3	3	3	3	3	4	3
750	CRRD	2	2	2	2	2	3	3	3	3	3	4	3
900	CRRD	2	2	2	2	2	3	3	3	3	3	4	3
1050	CDM	2	2	2	*	*	3	3	3	3	*	4	*
1200	CDM	2	2	2	*	*	3	3	3	3	*	4	*
1500	CDM/F	2	2	2	*	*	3	3	3	3	*	4	*

Solid Top Covers

Solid top covers are usually supplied in straight runs.

Pit clear opening spans	Cover type	Standard Pit clear opening length											
		1300	1450	1600	1750	1900	2000	2150	2300	2450	2600	2700	2750
600	CRSD	2	2	2	2	2	3	3	3	3	3	4	3
750	CRSD	2	2	2	2	2	3	3	3	3	3	4	3
900	CRSD	2	2	2	2	2	3	3	3	3	3	4	3
1200	CRSD	2	2	2	*	*	3	3	3	3	*	4	*

*Indicates standard sizes not available - The number shown indicates the quantity of cover parts - Other standard sizes may be available, refer to our technical department.



Heavy Duty Multispan Covers and Frames

Suitable for 11.5 tonne slow moving pneumatic wheel load. Cover test load - 400kN

Specification

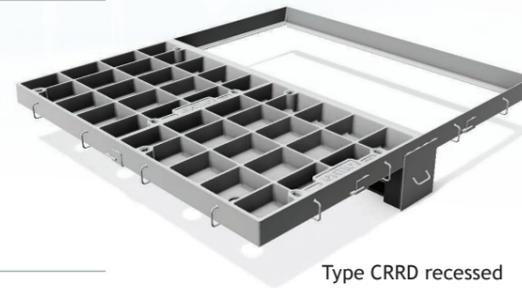
Below is sample specification information and notes for Multispan recessed covers and frames.

Loading group Gatic D400

11.5 tonne slow moving pneumatic wheel load - test load 400 kN.

Materials

- Covers: Ductile iron components to BS EN 1563.
- Structural steel removable beams to BS EN10365.
- Frame bars mild steel to BS EN 10025



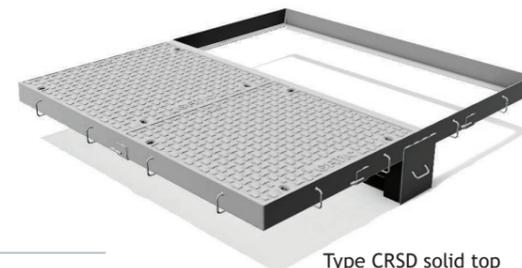
Type CRRD recessed

Finishes

- Covers coated with black bitumous solution for protection during transit.
- Removable supporting steelwork and side frames galvanised to BS EN ISO 1461.

Infill and surround concrete by customer

- Concrete strength, using 10mm coarse aggregate, to be:
 - 45N/mm² for a test cube of 150mm or
 - 40N/mm² for a test cylinder of 150mm diameter x 300mm high.



Type CRSD solid top

Installation

In accordance with instructions supplied by Gatic.

To specify use size and description format as follows:

COEX Multispan Recessed covers and frames Cover type CRRD recessed
Multiple access covers recessed for concrete infill with removable beams.

.... in no. (length) x (span) mm pit clear opening multi span cover and frame.
COEX Type CRRD Ductile Iron Recessed Cover in parts complete with
.... in no. x mm galvanised removable support beam spanning the (length) mm way.
Suitable for Loading Group D400 - 11.5 Tonnes Slow Moving Wheel Load (pneumatic tyre).

COEX Multispan Solid Top covers and frames Cover type CRSD solid top
Multiple solid top access covers with removable beams.

.... in no. (length) x (span) mm pit clear opening multi span cover and frame.
COEX Type CRSD Ductile Iron Solid Top Cover in parts complete with
.... in no. x mm galvanised removable support beam spanning the (length) mm way.
Suitable for Loading Group D400 - 11.5 Tonnes Slow Moving Wheel Load (pneumatic tyre).

Standard pit clear opening sizes are shown on Page 13.

Beam sizes and other dimensions are shown on Pages 14 and 15.

Multispan covers and frames

Product Selection

Refer to the table to identify which cover and beam configuration you require against pit clear opening length (L) and pit clear opening span (S). All dimensions are in millimetres.

	Pit clear opening span (S) mm	Pit clear opening length (L) mm												Beam centres mm															
		2 parts					3 parts				4 parts			A	B	C	D	E											
		1200	1350	1500	1650	1800	1900	2050	2200	2350	2500	2650	2800	2600	2750	2900	3050	3200	3350	3500	3650	3800							
2 parts 1 beam	1370	[Diagram]					[Diagram]				[Diagram]			685	685														
	1520	[Diagram]					[Diagram]				[Diagram]			835	685														
	1670	[Diagram]					[Diagram]				[Diagram]			835	835														
	1820	[Diagram]					[Diagram]				[Diagram]			985	835														
	1970	[Diagram]					[Diagram]				[Diagram]			985	985														
3 parts 2 beams	2140	[Diagram]					[Diagram]				[Diagram]			685	770	685													
	2290	[Diagram]					[Diagram]				[Diagram]			685	920	685													
	2440	[Diagram]					[Diagram]				[Diagram]			835	770	835													
	2590	[Diagram]					[Diagram]				[Diagram]			835	920	835													
	2740	[Diagram]					[Diagram]				[Diagram]			835	1070	835													
	2890	[Diagram]					[Diagram]				[Diagram]			985	920	985													
3040	[Diagram]					[Diagram]				[Diagram]			985	1070	985														
4 parts 3 beams	2910	[Diagram]					[Diagram]				[Diagram]			685	770	770	685												
	3060	[Diagram]					[Diagram]				[Diagram]			835	770	770	685												
	3510	[Diagram]					[Diagram]				[Diagram]			835	770	770	835												
	3360	[Diagram]					[Diagram]				[Diagram]			835	920	920	685												
	3510	[Diagram]					[Diagram]				[Diagram]			835	920	920	835												
	3660	[Diagram]					[Diagram]				[Diagram]			985	920	920	835												
	3810	[Diagram]					[Diagram]				[Diagram]			985	920	920	985												
3960	[Diagram]					[Diagram]				[Diagram]			985	1070	1070	835													
4110	[Diagram]					[Diagram]				[Diagram]			985	1070	1070	985													
5 parts 4 beams	3680	[Diagram]					[Diagram]				[Diagram]			685	770	770	770	685											
	3830	[Diagram]					[Diagram]				[Diagram]			685	770	920	770	685											
	3980	[Diagram]					[Diagram]				[Diagram]			835	770	770	770	835											
	4130	[Diagram]					[Diagram]				[Diagram]			685	920	920	920	685											
	4280	[Diagram]					[Diagram]				[Diagram]			835	920	770	920	835											
	4430	[Diagram]					[Diagram]				[Diagram]			835	920	920	920	835											
	4580	[Diagram]					[Diagram]				[Diagram]			835	920	1070	920	835											
	4730	[Diagram]					[Diagram]				[Diagram]			985	920	920	920	985											
	4880	[Diagram]					[Diagram]				[Diagram]			985	920	1070	920	985											
	5030	[Diagram]					[Diagram]				[Diagram]			985	1070	920	1070	985											
5180	[Diagram]					[Diagram]				[Diagram]			985	1070	1070	1070	985												

Note: For other pit clear opening sizes please refer to our technical department

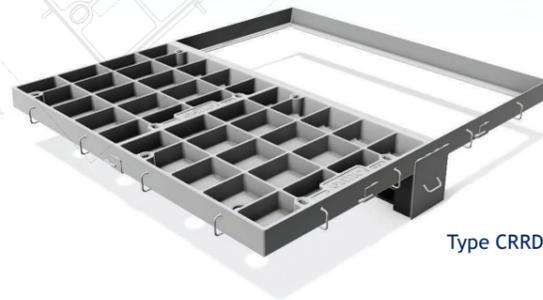


Heavy Duty Multispan Covers and Frames

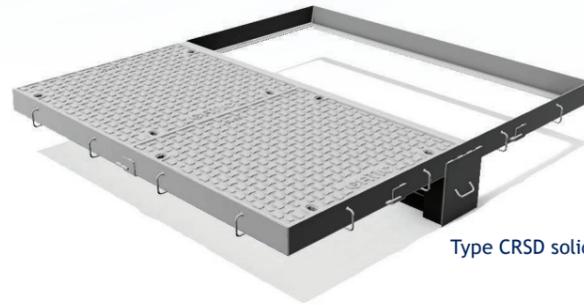
Covers recessed for concrete infill or solid top

Cover types: CRRD (recessed)
CRSD (solid top)

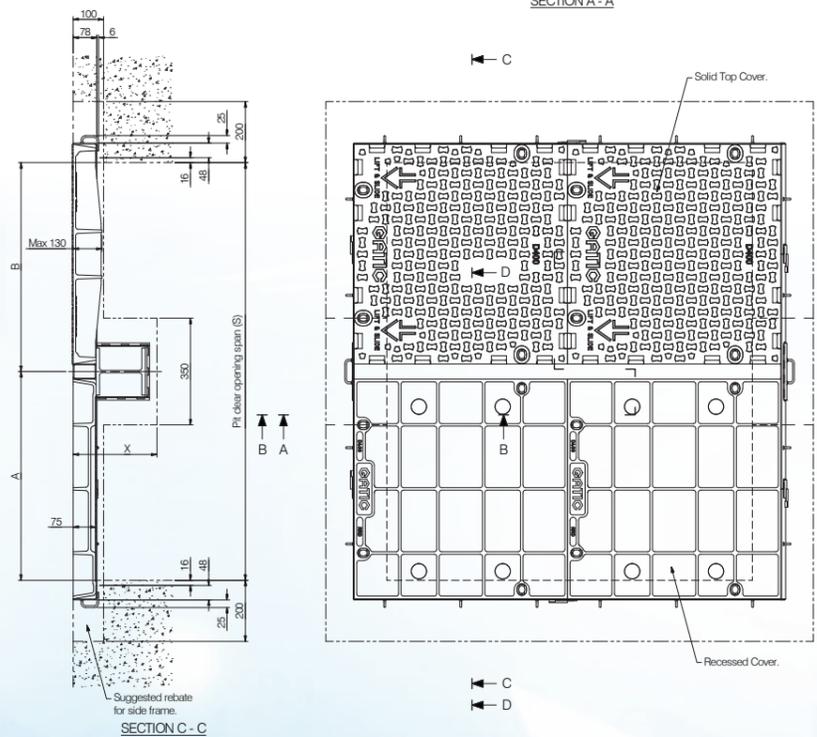
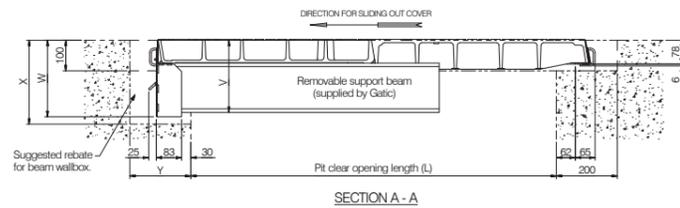
The details below show plan and sections of a typical recessed/solid top unit.



Type CRRD recessed



Type CRSD solid top



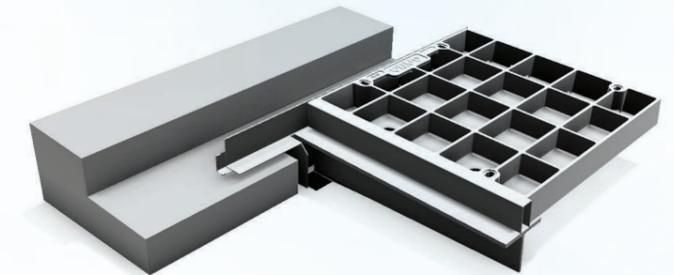
Multispan covers and frames

Beam Size

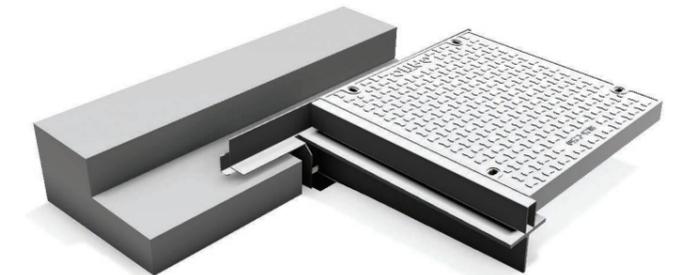
The required beam size for Multispan covers is dependent on the pit clear opening length and the loading group.

The table shows maximum beam length against beam size. The removable support beams are supplied by Gatic.

The table also indicates dimensions of the beam wallbox and rebate to suit different beam sizes. See also the accompanying section details.



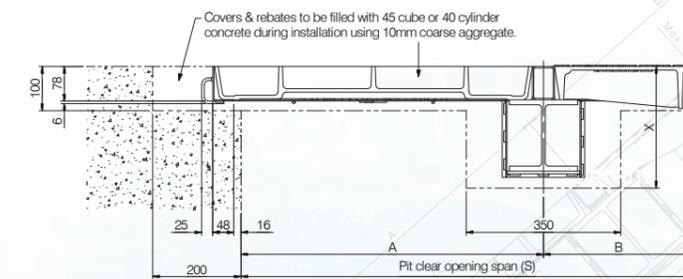
Type CRRD recessed



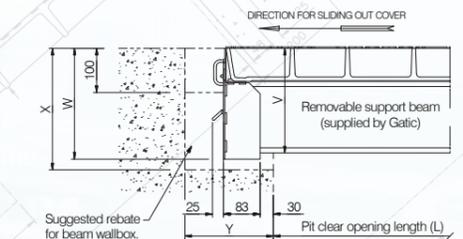
Type CRSD solid top

Support beam size chart

Removable support beam size	Max pit clear opening length (L)	Beam wallbox dimensions			
		V	W	X	Y
152 x 152 x 37kg/m UC	1650	237	251	280	200
203 x 203 x 52 kg/m UC	2350	281	295	325	200
305 x 165 x 54kg/m UB	2750	385	399	430	200
356 x 171 x 67kg/m UB	3200	438	452	485	300
457 x 152 x 82kg/m UB	3500	541	555	580	300
533 x 210 x 122kg/m UB	3800	620	634	660	300



Section D - D



Section B - B

GATIC

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