

GATIC® AssistLift

Makes light work of heavy covers.



Specialised Engineering. Special Advice.

Gas and Air Tight Inspection Covers with assisted opening.



Gatic has been setting the industry standard for access covers since 1928. Over this time we have developed products to suit many different industries. The AssistLift covers featured in this brochure have been refined over many years and are in service around the world.

AssistLift covers facilitate one person opening of a F900 load rated ductile iron cover either as an individual cover or as part of a multi cover arrangement.

The modular nature of the Gatic system of removable covers is designed to provide sealed, uninterrupted access to the services below whether as a single cover, duct or multispan arrangement with removable support beams. A removable system for virtually any size of pit configuration and loading can be developed.

Gatic covers are designed to protect and give access to a diverse range of underground services. Examples include, manhole/pump/valve/transformer chambers, pipe and cable service trenches, cable draw pits, lighting, fuel and fire hydrant pits, machinery/plant access chambers, tunnel shaft access chambers, combined sewer/overflow chambers and storm tie down pits.

Gatic specialise in the design of covers for airports, container ports, dockyards and industrial areas where extreme wheel loadings from aircraft, container carrying equipment and other vehicles may be encountered. Covers are available with recessed tops for concrete infill at site or with solid cast iron tops. AssistLift covers can be incorporated into larger covers for other loading categories upon request.

AssistLift gratings are also available, please refer to our technical office for details.

CONTENTS

- Solid top, side-hinged Gatic AssistLift covers – Type SSA
- Recessed and solid top Gatic AssistLift covers with back-end hinges – Type RGA & SGA
- Recessed and solid top, multispan covers with end-hinged AssistLift covers – Type RGA & SGA



Approved to BS EN ISO
9001:2008 Certificate
No. FM 593418



Approved to ISO
14001:2004 Certificate
No. EMS 593419

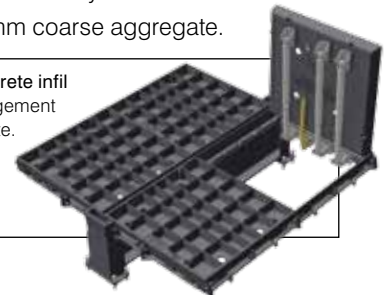
Cover types

Covers are available either recessed for concrete infill at site or with solid ductile iron tops.

Concrete infill recessed covers

Recessed covers are designed for infilling at site. Concrete should be as specified in BS EN 124:1994 - 45/mm2 for a test cube 150mm or 40N/mm2 for a test cylinder 150mm dia x 300mm high, using 10mm coarse aggregate.

AssistLift cover recessed for concrete infill
Covers are designed with an arrangement of openings for infilling with concrete. This provides a very strong and hardwearing surface with an attractive appearance.



Anti-slip surface

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 Gatic covers are manufactured from the following materials: Ductile iron to BS EN1563:2011 Structural steel sections (removable support beams) to BS4-1:2005. M-Struts® and hinges in stainless steel grade 304.

Fine tolerances

The seating faces of Gatic covers and frames are machined finished and assembled in metal to metal contact within a tolerance of 0.25mm.

Non-rocking

Correctly installed, Gatic covers will be non-rocking under traffic and sealed against road dirt and other detritus.

Watertight

A film of graphite grease between the machined contact faces of Gatic covers and frames provides a gas and airtight seal and a watertight joint under normal rainwater conditions.

Removal/Replacement slide-out covers

The machined seating faces facilitate the sliding out of covers for removal and replacement. Lifting keys are available on request for use with cranes and other mechanical devices.



Loading Group F900

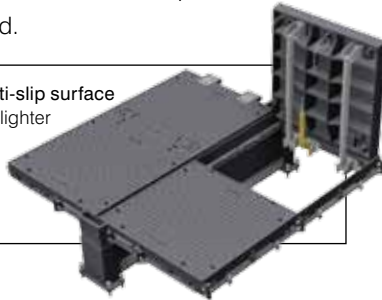
Test Load 900 kN – For areas imposing particularly high wheel loads, aircraft pavements, taxiways of civil airports and dockyards where individual wheel loadings exceed 20 tonne.



Secure and vandal resistant

Covers are designed to prevent tampering and unauthorised removal without the use of the specially designed Gatic lifting keys. Locking bolts can be fitted to Gatic cover keyways as an additional security feature. Gatic Type SSA covers incorporate a slam latch mechanism complete with a retained locking bolt. Gatic Types RGA and SGA incorporate two locking bolts as standard.

AssistLift cover with solid top, anti-slip surface
High performance covers that are lighter in weight than those incorporating concrete infill, solid top covers feature a raised lozenge design on the surface.



Closed keyways

Gatic cover keyways are closed and supplied with plastic plugs to prevent them from blocking with detritus.

AssistLift cover pop open / hard close

All Gatic AssistLift covers can be set at any time as follows:
Pop open – The AssistLift cover can be set to automatically partially open from the closed position after unlocking.
Hard close – The AssistLift cover will require manual assistance to lift the cover from the closed position.

Safe Lifting – AssistLift covers

Gatic AssistLift covers have been designed to be lifted and closed by a single operator. The maximum lifting and closing force will be approximately 25kg depending on the size, type and lifting characteristic that has been chosen.

M-Struts®

M-Struts® are designed for demanding environments and provide a maintenance free alternative to conventional gas struts. **M-Struts®** are made of grade 304 stainless steel. Unlike gas and pneumatic models, **M-Struts®** have no internal gases to leak or seals to fail in extreme conditions.

Hinges

Gatic AssistLift covers are supplied with flush-fitting hinges as standard but can be supplied with barrel hinges upon request.

Loadings

All Gatic covers within this brochure will withstand the test load, deflection and maximum deformation criteria specified in BS EN124 for load category F900.

Vibration resistant

To prevent the movement of covers in high density traffic conditions we recommend the use of a factory fitted vibration resistant locking system which can be fitted in recessed covers only. Gatic do not recommend the use of either solid top or assist lift covers in high density traffic conditions.

Beam wallbox

Supporting beams in Gatic multispan units can be easily removed with the appropriate lifting equipment to give uninterrupted access to the total chamber area. The beam wallboxes do not project into the chamber opening.

Finishes

Covers and frames are coated with black bituminous solution which forms a temporary protection during transit. Removable support beams are galvanised to BS EN ISO 1461:2009. When installed in extreme environments, the covers and frames can also be galvanised, when specified.

Levelling bolts

All side frame bars and wallboxes are fitted with bolts to assist in the levelling of the unit during installation.

Safety grids

Hinged, lift out, galvanised steel safety grids with a padlock facility can be incorporated into Gatic units upon request.

Environmental commitment

To meet this requirement, we use an integrated Quality (BS EN ISO 9001: 2008) and Environmental (BS EN ISO 14001: 2004) Management System, which encompasses the design, manufacture and management systems within the company and ensures continuous environmental improvements in the manufacture and design of all of our products.

Installation

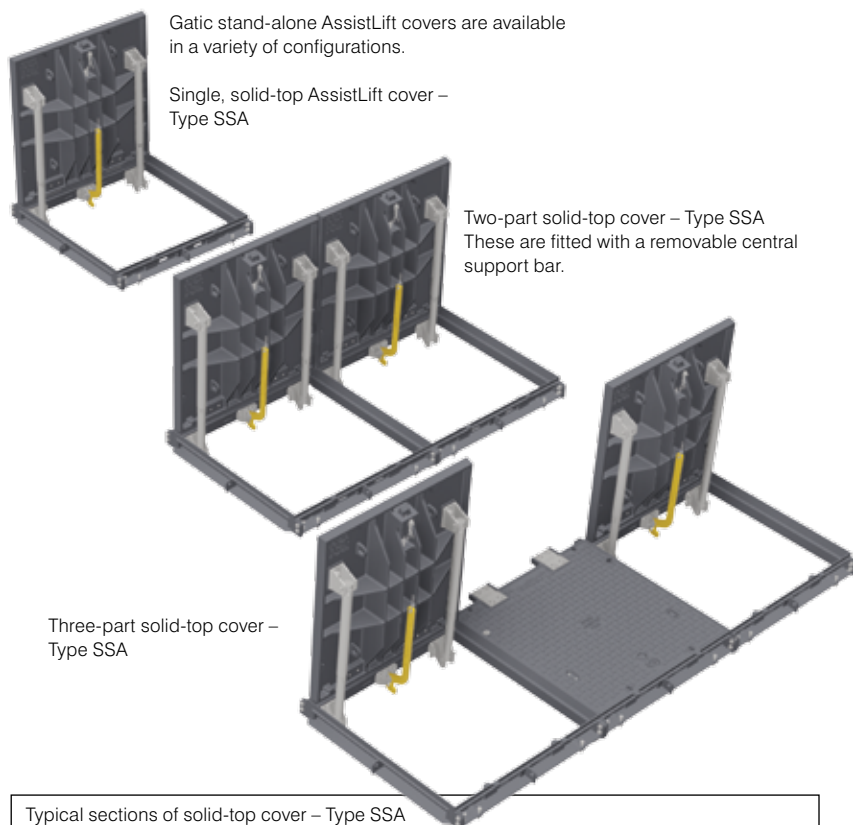
Detailed instructions are supplied with each delivery and available upon request.

Gatic services

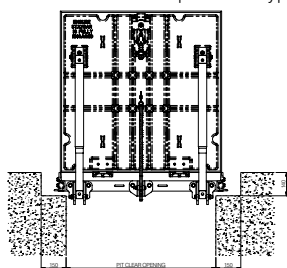
Gatic offer a full technical support service to designers and contractors, including AutoCAD compatible details of all Gatic products. In view of our commitment to ongoing product improvement, we reserve the right to alter designs without notice. Design changes will not adversely affect the load bearing capability or performance of our products.

Gatic AssistLift side-hinged covers.

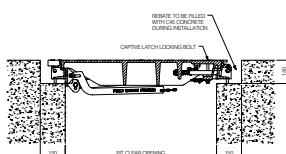
Gatic Type SSA side hinged covers are all assist lift to give complete access to the chamber below.



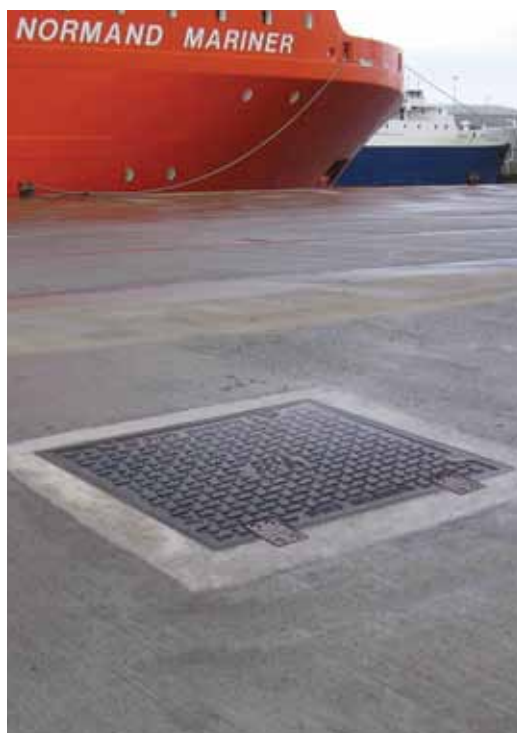
Typical sections of solid-top cover – Type SSA



Cover open – front view



Cover closed – side view



Gatic with side hinged AssistLift covers

These can be supplied in standard units as per the sizes shown on the chart below.

Longer lengths are available

Number of cover parts are shown in the boxes under the standard pit clear opening length (L)

Pit clear opening Span (S)	Solid Top Cover type	Standard Pit clear opening lengths (L)						
		750	1570	2390	3210	4030	4900	5770
760	SSA	1	2	3	4	5	6	7

Pit clear opening Span (S)	Solid Top Cover type	Standard Pit clear opening lengths (L)						
		900	1870	2840	3810	4780	5750	6720
910	SSA	1	2	3	4	5	6	7

Gatic AssistLift covers with end hinges.

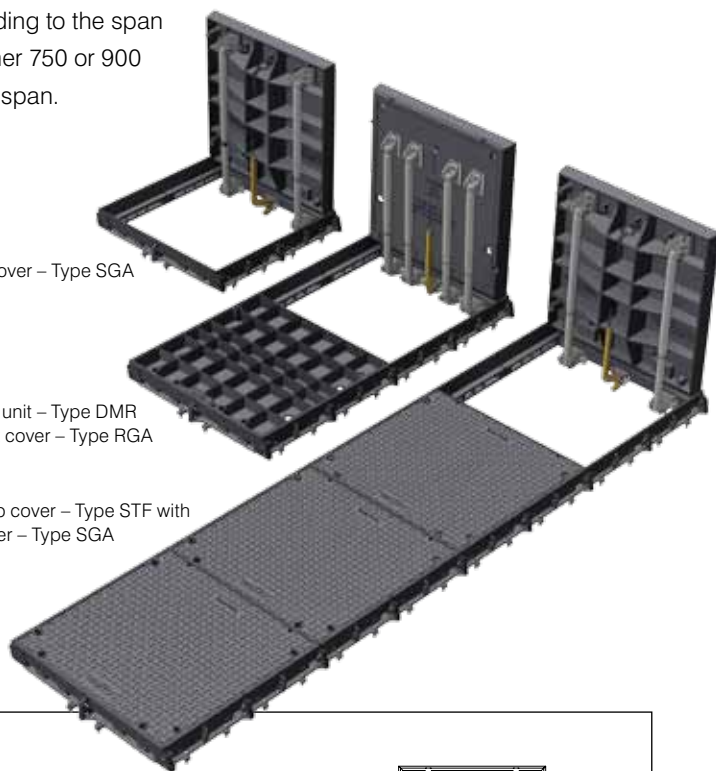


Gatic Type RGA and SGA end hinged covers give complete access to the chamber opening when used as a single cover. When integrated as part of a duct or multispan arrangement, they provide either one person access to a chamber above a ladder or access to equipment that would need to be inspected/operated on a regular basis. Covers are available for individual lengths according to the span selected – either 750 or 900 clear opening span.

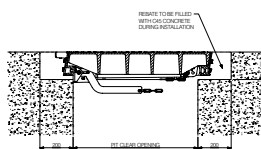
Single AssistLift cover – Type SGA

Double, recessed unit – Type DMR with end AssistLift cover – Type RGA

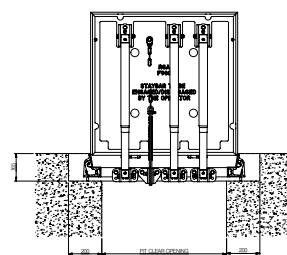
Four-part solid-top cover – Type STF with end AssistLift cover – Type SGA



Standard cross sections



Type SGA – closed side view



Type RGA – cover open front view

Gatic recessed or solid top covers and frames with one AssistLift cover at the reverse end of the unit. These can be supplied in standard units as per the sizes shown on the chart below.

Longer lengths are available

Number of cover parts are shown in the boxes under the standard pit clear opening length (L)

Pit clear opening Span (S)	Solid Top Cover type	Recessed Cover type	Standard Pit clear opening lengths (L)														
			750	900	1450	1600	1750	1900	2150	2300	2450	2600	2750	2850	2900	3000	3150
750	SGA	RGA	1	*	2	2	2	*	3	3	3	3	3	4	*	4	4
900	SGA	RGA	*	1	*	2	2	2	*	*	*	3	3	*	3	*	*
			3300	3450	3750	3850	3900	4000	4150	4250	4300	4450	4600	4750	4850	4900	4950
750	SGA	RGA	4	4	4	5	*	5	5	5	5	5	5	5	6	*	7
900	SGA	RGA	*	4	4	*	4	*	*	*	5	5	5	5	*	5	*

*Indicates non availability of a product fitted with an assist lift cover

Gatic AssistLift multispan covers and frames.

Gatic multispan access covers incorporate removable support beams so that much larger pit openings can be covered. The table shows standard multispan units that can have an AssistLift cover installed at the back end of the unit. In some cases, more than one AssistLift cover can be fitted.

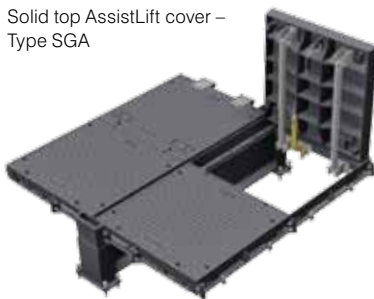
The dimensions shown in **green** can be fitted with a 750 x 750 clear opening AssistLift cover. Whilst the dimensions shown in **red** can be fitted with a 900 x 900 clear opening AssistLift cover. Typical cross section and beam sizes can be found on the page opposite.

These heavy duty covers are specifically designed for airports, container ports and docks where abnormal wheel loadings from heavy vehicles are envisaged.

Please refer to our technical department with details of specific requirements so that a detailed proposal may be prepared.



Solid top AssistLift cover – Type SGA



Recessed AssistLift cover – Type RGA

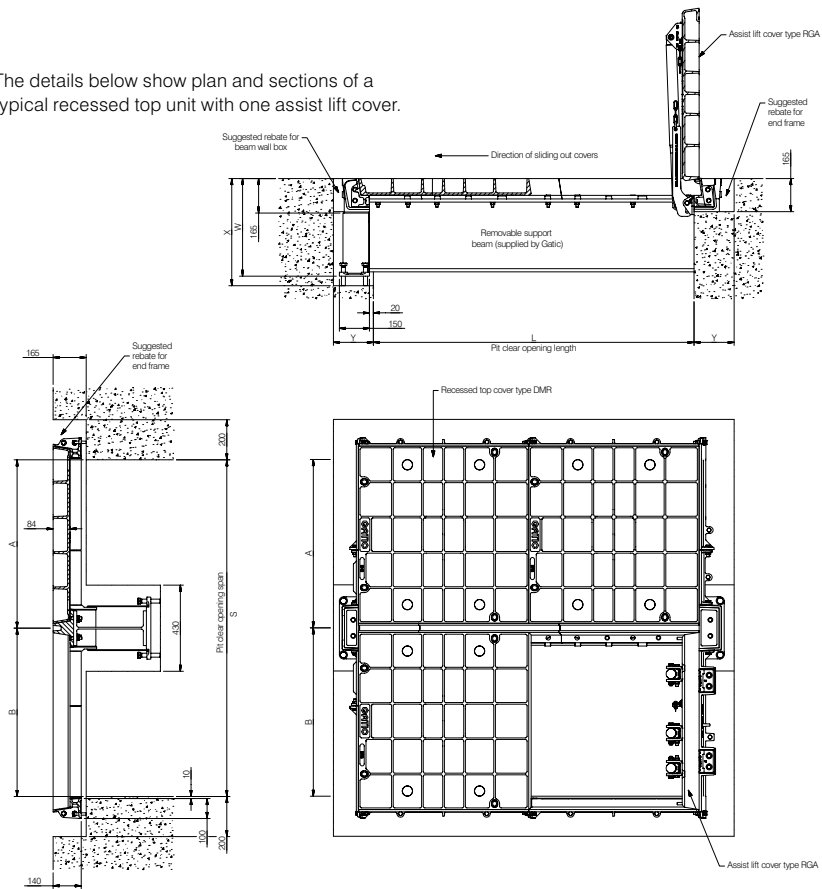


* Indicates non availability of a product fitted with an assist lift cover

		Pit clear opening length (L) mm																	Possible number of Assist Lift Covers	
		2 parts				3 parts				4 parts				Beam Centres						
														A	B	C	D	E	750	900
		1450	1600	1750	1900	2150	2300	2450	2600	2850	3000	3150	3300	840	690				1	*
				*					*					840	840				2	*
														840	990				1	1
														990	990				*	2
Pit clear opening span (S) mm	2 parts 1 beam	1530																		
	1680																			
	1830																			
	1980																			
3 parts 2 beams	2310													690	930	690			1	*
	2460													840	780	840			2	*
	2610													840	930	840			3	*
	2760													840	1080	840			2	1
	2910													990	930	990			1	2
4 parts 3 beams	3060													990	1080	990			*	3
5 parts 4 beams	3090													840	780	780	690		1	*
	3240													840	780	780	840		2	*
	3390													840	930	930	690		3	*
	3540													840	930	930	840		4	*
	3690													990	930	930	840		3	1
6 parts 5 beams	3840													990	930	930	990		2	2
	3990													990	1080	1080	840		1	3
	4140													990	1080	1080	990		*	4
7 parts 6 beams	3870													690	780	930	780	690	1	*
	4020													840	780	780	780	840	2	*
	4170													690	930	930	930	690	3	*
	4320													840	930	780	930	840	4	*
	4470													840	930	930	930	840	5	*
	4620													840	930	1080	930	840	4	1
	4770													990	930	930	930	990	3	2
	4920													990	930	1080	930	990	2	3
	5070													990	1080	930	1080	990	1	4
	5220													990	1080	1080	1080	990	*	5



The details below show plan and sections of a typical recessed top unit with one assist lift cover.



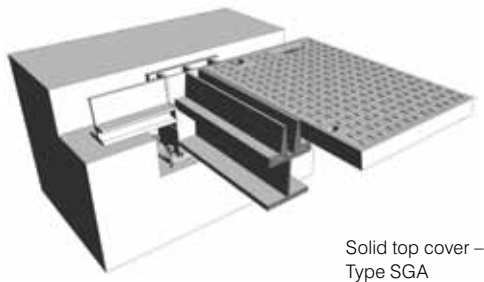
Beam size

The required beam size for multispan covers is dependant upon the pit clear opening length and the loading group.

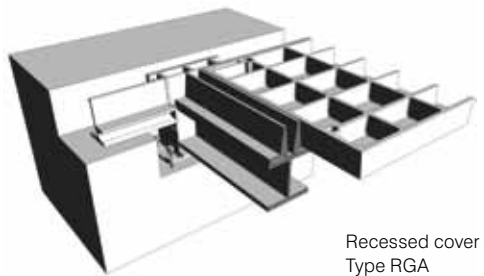
The table shows the minimum beam length against beam size. The removable support beams are supplied by Gatic.

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

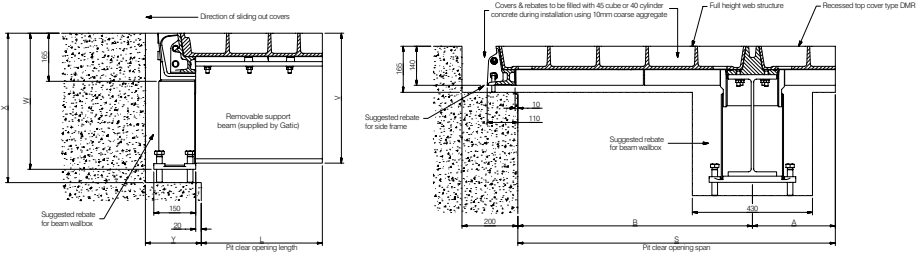
Removable support beam size	Max pit clear opening length (L)	Beam wallbox dimensions			
		V	W	X	Y
356 x 171 x 67kg/m UB	1750	467	490	535	300
457 x 152 x 82kg/m UB	2300	568	595	635	300
533 x 210 x 122kg/m UB	3300	648	670	715	300
610 x 229 x 140kg/m UB	3900	720	745	790	300



Solid top cover – Type SGA



Recessed cover – Type RGA



Gatic
Poulton Close
Dover
Kent CT17 0UF
United Kingdom

Tel no: +44 (0) 1304 203545
Fax no: +44 (0) 1304 215001
email: info@gatic.com
websites: www.gatic.com

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Interactive website

The brand new, redesigned GATIC website is user-friendly and offers full details of the entire range of Covers as well as Gatic Slotdrain surface water drainage products. Here you will find details of features and benefits, sizes and load categories, together with contact information.



Installation and Operating Guides

Complete and fully illustrated installation and operating guides are available for all AssistLift products. These are designed to ensure the health and safety of everyone in the commissioning and on-going operation of these products.



Access Covers Full Technical Brochure.

Illustrated literature providing key applications, features, benefits, load categories and full technical details of the GATIC Air and Gas Tight Covers product range, including AssistLift.



Access Cover information DVD

Interactive DVD containing complete information of the entire Access cover range of products, their handling, installation and maintenance,