



WATER • WASTEWATER • STORMWATER
SOLUTIONS

CertainTeed
PAM

Access Covers and Gratings

REXUS Manhole Covers



LOAD BEARING 100,000 LBS



ONE-MAN OPERABLE



ANTI-THEFT/SECURITY



CertainTeed 
Quality made certain. Satisfaction guaranteed.

Advanced Ergonomics

REXUS enables utility personnel to undertake visual inspections and routine maintenance of underground networks with the minimum effort and in complete safety.



- Hinge design reduces the effort of opening covers by 50% utilizing standard tools (pickaxe and hooks).
- Hinge reduces the duration of the lift, thereby reducing the risk of injury to the operator.

- Hinge retains the cover in a safe and controlled manner throughout the opening and closing sequence.
- Lifting loops incorporated into the frame ease handling and installation with appropriate and safe equipment.

Strength

- REXUS significantly exceeds the AASHTO (American Association of State Highway and Transportation Officials) H20 heavy duty load resistance requirement.
- REXUS is independently tested by an accredited organization to $\geq 100,000$ lbs.



Quality Assurance

The REXUS cover has been designed and manufactured within a certified ISO 9000 quality management system, certified by an independently and internationally recognized third party. REXUS has been subjected to a strict testing program.

- Laboratory testing: accelerated wear test.
- Extensive field testing, including high speeds and heavy traffic conditions. These tests confirmed that REXUS can be used in any major thoroughfare.

Advanced Safety

Ductile iron technology enables the development of super-strong, ultralight covers and frames.

- The spring bar locking mechanism ensures the cover and frame seating remain in perfect contact.
- The locking mechanism keeps the cover held against the sound-proofing ring; the cover is prevented from rocking and complete silence is ensured.
- The cover can be locked without any special tools, simply by applying pressure with the foot.
- Before reopening the road to traffic, utility personnel must make sure that the cover is properly replaced and that the spring bar lock has engaged.

Security

REXUS offers four improved levels of security, designed to provide increasing degrees of resistance to unauthorized access. It must be noted that none of these levels will prevent the determined criminal or vandal from gaining access.

- Prevention of cover theft is achieved by activating a spline located in the hinge housing. The safety blocking is activated once the cover is in the frame.
- Resistance to young children comes as standard thanks to the spring bar lock, which requires a tool and physical strength to deactivate.
- Unauthorized access is prevented by fitting the Penta locking kit.
- Additional security can be provided by the SCS locking kit.

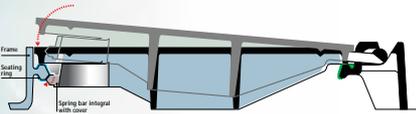


Spring Bar Lock

REXUS features a unique spring bar locking system, which is an integral part of the unit. This locking system combines ductile iron technology and decades of extensive experience in designing and manufacturing ductile iron municipal castings.

How does the spring bar lock function?

By harnessing the compressive forces that are created when the spring bar is in the closed position, the cover is held securely against the seating ring. Horizontal and vertical movement of the cover is thus eliminated, so that the cover is silent in operation. The spring bar automatically activates when the cover is closed.



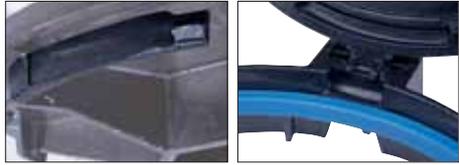
How is the spring bar lock released?

- Opening — The spring bar lock is deactivated by inserting a bar/pickaxe blade into the prizing slot in the front of the frame, then applying a little upward force until the cover pops open.
- Closing — The spring bar lock will be automatically activated if the cover is released part way through its closing arc. If the cover has been gently lowered into position it may be necessary to step on the raised part of the cover to ensure the spring bar lock has deployed correctly.



Durability of the spring bar lock

The spring bar lock has been designed to operate within the elastic limit of the specific grade of the ductile iron we produce in our foundry. In the laboratory, more than 400 opening and closing cycles were performed, during which the spring bar lock retained its efficiency. As far as field testing, this technology is now seven years old, with more than 1 million units in service. The spring bar lock does not require any on-



site adjustment. Any unauthorized modification of the spring bar may adversely affect its performance.

Durability of the seating ring

The seating ring is manufactured from a specifically formulated composite material that is known to have a high resistance to extremes of temperature, abrasion and shocks resulting from traffic flow and cover operation.

REXUS Anti-theft Cover Locks

Penta Locking Kit

- 1/4 turn lock actuated by an asymmetrical five-sided bolt head.
- On-site installation takes five minutes:
 - Punch out the center of the locking bolt area.
 - Install the kit in compliance with the instructions supplied.
- Lock must be operated with the handling key (supplied with the kit; can be purchased separately).

Penta Kits for REXUS Covers

MODEL	REFERENCES
Kit with handling key	C13
Kit without handling key	C14
Handling key	C17



SCS Locking Kit

- 1/4 turn lock is activated by a bolt that has a unique notched cylindrical head design. This feature improves security by ensuring that the SCS locking key can only be removed once the manhole cover has been returned to the locked position.
- The SCS key has an internal trigger-operated lug that releases the key from the head of the bolt.

– The key can only be released once the manhole cover is locked, thus making it impossible to forget to lock the cover.

- On-site installation takes five minutes:
 - Punch out the center of the locking bolt area.
 - Install the kit in compliance with the instructions supplied.



- Requires use of the SCS key included in the complete kit or sold separately.
 - It is recommended the SCS key not be used to open the covers. Covers should only be opened using standard tools and the lifting points provided.

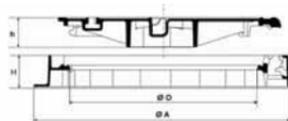
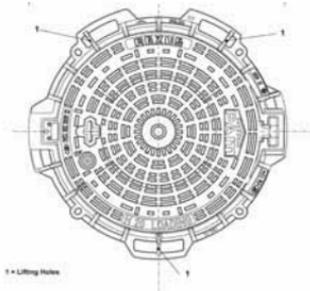
SCS Kits for REXUS Covers

MODEL	REFERENCES
Kit with handling key	C15
Kit without handling key	C16
Handling key	C18

The REXUS Cover Range



REXUS, CIRCULAR FRAME AND COVER, NON-VENTILATED, FITTED WITH ANTI-THEFT SPLINE						
BADGINGS	REFERENCES	MASS (LBS.)		DIMENSIONS (IN.)		
		COVER	TOTAL	A	O	H
Standard (none)	CDRU60EH	91	155	33-1/4	24	4
Sewer	CDRU60EHSEW	91	155	33-1/4	24	4
Sanitary sewer	CDRU60EHSSE	91	155	33-1/4	24	4
Drain	CDRU60EHDRA	91	155	33-1/4	24	4



Specification

- REXUS or similar approved Manhole Cover and Frame.
- Covers and Frames shall be manufactured from Ductile Iron in accordance with ISO 1083.
- Covers shall be hinged and incorporate a 90° blocking system to prevent accidental closure.
- Covers shall be one-man operable using standard tools and shall be capable of withstanding a minimum load of 100,000 lbs.
- Covers shall incorporate a spring bar locking system, which automatically activates when the Cover is closed.
- Additional security features shall include a device to prevent the Cover from being completely removed from the Frame. This device shall be capable of being deactivated if required.
- Frames shall be circular and shall incorporate a seating ring, and shall have a 24" clear opening.
- Frame depth shall not exceed 4"; frame flanges shall incorporate bedding slots and bolt holes.
- All components shall be black coated.
- Product shall be manufactured in ISO 9000 certified manufacturing plants.

REXUS Manhole Covers



PAM products have achieved a worldwide leadership position by delivering on CertainTeed's core values of safety, quality and compliance with national and international standards. The REXUS manhole cover draws on many years of experience in the design and manufacture of safe, durable and efficient municipal castings.

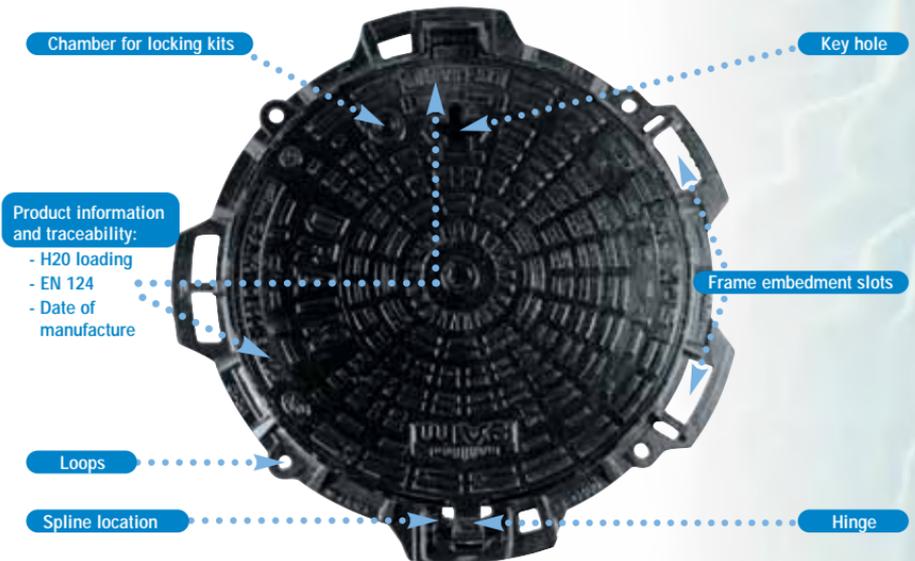
Designed for the intense traffic conditions found in North America, the H20 load rated REXUS cover is a one-man operable unit that meets the needs of public utility engineering and maintenance personnel in the areas of performance, operation and safety.

There are over 6 million PAM units in the ground around the world utilizing technically advanced materials and engineering. Our focus on the needs of the end-user — rather than developing products merely to meet a minimum performance standard — led us to ductile iron, a superior alternative to cast iron in terms of weight, strength and designability.



Highlights

- Ductile iron
- Cover with 90° blocking mechanism
- Spring bar locking
- Exceeds H20 loading
- Available in 24" opening
- Optional locking features
- Hinged cover
- Independently certified



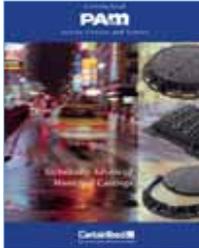
PAM Access Covers, Curb Units and Gratings.

CertainTeed has an extensive network of agents and distributors, which ensures that products and technical advice are always available locally.

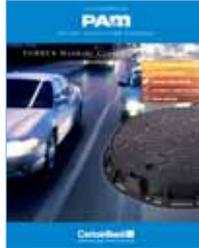
For more information call 1-877-351-3323, or refer to the PAM general presentation brochure or specific product brochures shown below.



Additional literature:



PAM General Brochure



PAMREX Manhole Covers



PAMTIGHT Manhole Covers



REXUS Gratings



SELECTA Curb Units

ASK ABOUT OUR OTHER CERTAINTEED PRODUCTS:

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