DATA SHEET DP-252

ENGINEERED BRICK RAINSCREEN SYSTEMS

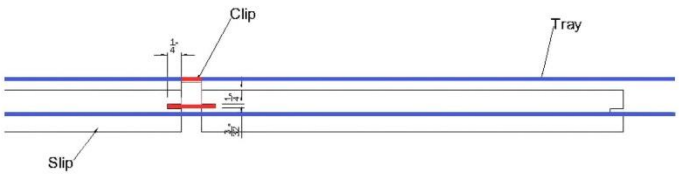
The DURUS Locking Clip (LC) System Pat. Pend.
Mechanically Attached Brick Rainscreen System

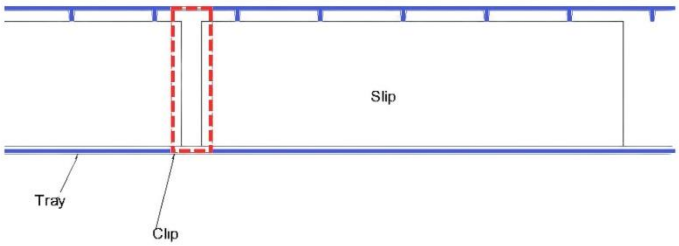
DESCRIPTION

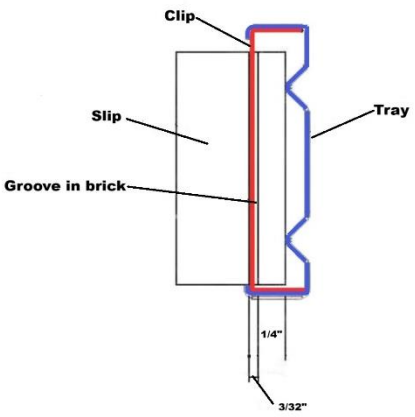
The DURUS LC System is a fully engineered, open joint, brick rainscreen system with dedicated water management, open cavity, and rear ventilation. The DURUS LC System employs (patented) stainless steel locking clips to provide long-term holding strength to permanently secure the bricks. The system is wall mounted or stud loaded, with aluminum subframing to create an open cavity for drainage, ventilation, and continuous insulation. The LC System meets the latest energy codes including ASHREA 90.1-2022, Passive House, and latest stretch code energy requirements.











10 Worthington Road Suite K • Cranston, RI 02920 • Phone 401.942.5640 • www.desanapartners.com • info@desanapartners.com

DATA SHEET DP-252

STAINLESS STEEL LOCKING CLIPS/TRAYS

Patented clip design is a reciprocal profile to the tray where the clips are inserted. Each clip is held in place behind the upper and lower lip edges of the tray. Each brick has slotted grooves in the side of the brick that fit directly over the clip.

The slotted brick is placed into the tray then the clip is inserted into the tray alongside the brick and slid into the slot. The adjoining brick is inserted into the tray and moved to fit over the clip. Once completed the interface secures the bricks with up to 50 pounds of resistance. *Actual pounds may vary depending on the strength of the brick selected.*

Features	**Benefits**
The DURUS LC System is designed for high-rise construction up to 50 stories.	The DURUS LC System assures that all bricks are permanently secured and will not dislodge or fall from the wall.
It is ideal for use with off-site panel construction including curtainwall and mega panels.	Bricks used in the system show precision, clarity, and depth providing a cleaner, brighter and classic appearance to a brick veneer.
The system is compatible with a variety of structurally sound substrates including block, concrete, parged concrete, steel and wood framing making it ideal for recladding solutions.	The DURUS LC System is a fully engineered brick rainscreen assembly with open joints, rear ventilation, dedicated water management facility, and continuous insulation.
	Lightweight at approximately 12 lbs. per square foot, the system is very versatile making it ideal for a wide range of substrate conditions including recladding projects.

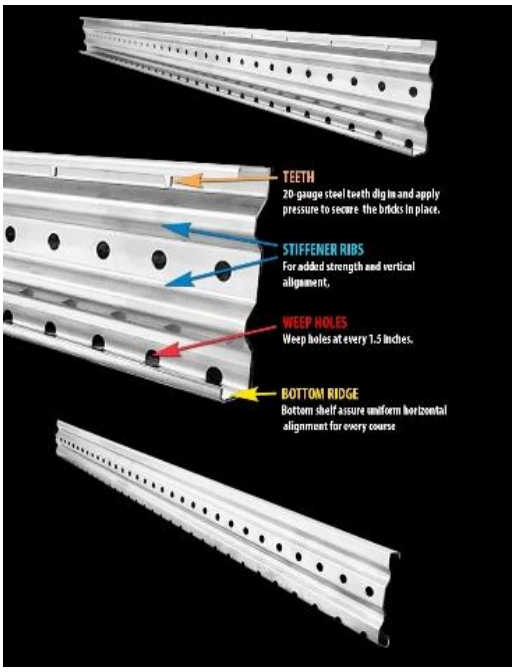
ADVANTAGES OF THE DURUS LC SYSTEM

- Eliminates application of mortar, striking/tooling
- Eliminates acid wash and the mortar residue left behind
- Eliminates efflorescence
- Eliminates mortar maintenance and tuck pointing costs
- Eliminates the need for tenting and protection at the site
- Shorter installation times allow the project to progress to landscaping, sidewalks, concrete, and access to the site.

10 Worthington Road Suite K • Cranston, RI 02920 • Phone 401.942.5640 • www.desanapartners.com • info@desanapartners.com

DURUS LC – HIGH PERFORMANCE WALL ASSEMBLY

The full assembly of the DURUS LC system provides multiple lines of defense against moisture and water infiltration.



- The external layer consists of an open joint full brick rainscreen assembly.
- Each tray securing the bricks is fixed with the one above and the one below providing a monolithic drainage plane behind the bricks with drainage.
- A 2" open cavity with ongoing convection air flow allows incidental moisture to drain out from the system and keeps the cavity dry with ventilation.
- An uninterrupted air/moisture barrier provides the final layer of protection protected by the insulation layer.

The DURUS System from Desana is the strongest stud loaded system in North America with structural testing up to 134psi. This qualifies the system for 50 story construction. The DURUS LC System is designed for mid to high rise construction. To reinforce the holding power of brick Desana has included a third dimension to securing the bricks along with the strength of the trays and the adhesive. Each brick is cut at the head which allows for a metal locking clip to be inserted into the brick. The Locking Clip is held in place by the tray. Once the bricks and clips are in place, there is no chance the bricks will break free. They are secured for as long as the structure is standing.

The DURUS LC System trays come with a choice of stainless steel, aluminum, or marine grade aluminum and galvanized steel. Clips and trays can be color coated. In lieu of mortar the appearance is one of brick with dimension. Bricks stand out cleanly with precision site lines along all four sides of the brick. Joint lines are consistent with uniform dimensions.

Trays can be coated with a wide selection of colors to match the brick color. Architects are free to use matching colors, contrasting colors, or companion colors to the bricks.

The result is a fully engineered, mechanically attached brick rainscreen assembly with dedicated water management for drainage. Gone are the costs and labor for mortar, the acid wash down, barrel mixers, hoses, mud, and water on the site. This system can be installed by masons, façade contractors, panelizers and curtainwall contractors with confidence.

THERMAL PERFORMANCE – ASHRAE 90.1

The DURUS LC System from Desana is fully engineered, thermally broken and meets the principle of ASHRAE 90.1 and all local stretch codes. Brackets are thermally isolated from the substrate with 5-10mm PVC isolation pads providing the thermal break necessary to meet energy standards. Each system allows for continuous insulation up to 9" in thickness, uninterrupted air/barrier, and fully vented cavity. Sub framing for each system has been reviewed by Rockwool. Results of thermal performance are available from Desana upon request.

10 Worthington Road Suite K • Cranston, RI 02920 • Phone 401.942.5640 • www.desanapartners.com • info@desanapartners.com

COLOR COATING
Trays and clips for the DURUS LC System are available in several colors to meet your intended design.

IMPROVING CARBON FOOTPRINTS
Desana has eliminated the weakest and most destructive components of brick veneers. It is common knowledge that it is the mortar that deteriorates before the brick. But there are other associated issues with brick.

Mortars are used as a binding agent in construction worldwide, and they are made by mixing cement, sand, and water. However, the manufacture of mortars is associated with significant carbon emissions, which contribute to climate change. We also know the construction industry accounts for about 39% of global carbon emissions, making it one of the largest contributors to climate change.

The elimination of mortar will have significant implications for the construction sector. While difficult to measure with specificity, reduction or elimination of mortar in brick veneers will see improved environmental performance, a reduction in the carbon footprint of mortars and, a mitigation, however measured, of climate change. (Corporate Energy 2023)

YouTube

DURUS LC System Video

Issued 6/2024

10 Worthington Road Suite K •Cranston, RI 02920 •Phone 401.942.5640 •www.desanapartners.com •info@desanapartners.com