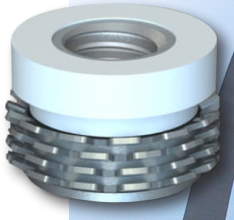
KEEP-NUT™ by specialinsert

Press In Self-Anchoring Threaded Inserts

IM4S/P1.4-20/H8.5 (4 Crown Keep-Nut)



KEEP-NUT Inserts Put to Work in National Landmark Project

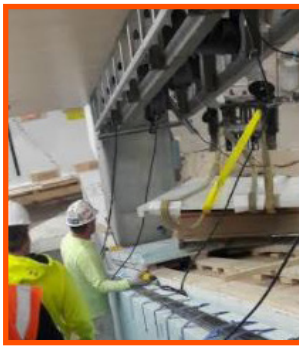
The Keep-Nut was recently chosen as the perfect anchor and cladding system for the recent renovations at the Gateway Arch in St. Louis, MO. Set to open in July of 2018 the new Museum and Visitors Center will be featuring Ceaserstone Quartz Panels hanging from the walls and ceilings throughout.

Lami Wood Products out of St. Charles, MO was put in charge of the project and reached out to our representatives at Chemical Concepts for our best recommended fastening system. The **Keep-Nut by Special Insert** came to mind as their perfect option.

Description of Application: Lami Wood Products was in need of a 1/4-20 thread heavy duty fastener with significant pull-out strength in Caeserstone Quartz. Their goal was to use these fasteners in the Quartz and to fasten the Keep-Nut in with a Unistrut fastening system in order to support wall and ceiliong panels.

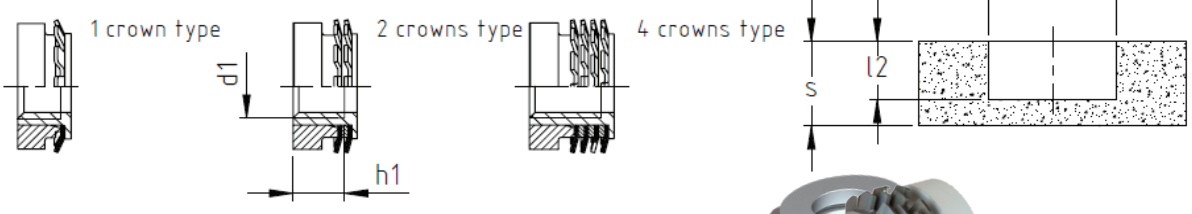
Our Answer: IM4S/P1.4-20/H8.5 (4 Crown Keep-Nut) Although the IM2S/P1.4-20/H6 (2 Crown Keep-Nut) is standard

Installation



The next task was installing the Keep-Nut into the Quartz using CNC Equipment then attaching each insert to the Unistrut framing system.

Part	# of Crowns	Thread (d1)	Thread Length (h1)	Hole Depth (l2)	Hole Diameter +/- .2mm (d2)	Average Pull-Out Strength
IM1S/P1.4-20/H5	1	1/4-20	4.5 mm (.18")	5 mm (.20")	12 mm	202 lbs
IM2S/P1.4-20/H6	2	1/4-20	5.5 mm (.22")	6.5 mm (.25")	12 mm	562 lbs
IM4S/P1.4-20/H8.5	4	1/4-20	7.5 mm (.30")	8.5 mm (.34")	12 mm	787 lbs
IM4S/P1.4-20/H15	4	1/4-20	14 mm (.55")	15 mm (.59")	12 mm	944 lbs



Chemical Concepts, 410 Pike Road, Huntingdon Valley, PA 19006

800.220.1966

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Installation Instructions

1 Using our 11.8mm CNC Bit to drill each hole

Easily the most important item during the installation process, our 11.8mm 1/2 GAS CNC Drill Bit makes sure each drilled hole is done to perfection. Since each insert has a unique metric diameter, the 11.8mm CNC bit drills each hole to the exact diameter of the insert.

2 Testing each hole with the Go/No-Go hole tester

This tool helps test each holes depth and diameter before inserting the Keep-Nut.

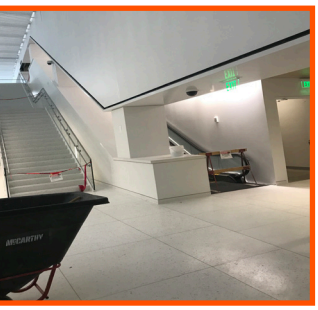
3 Inserting the Keep-Nut™ with the Keep-Nut insertion tool

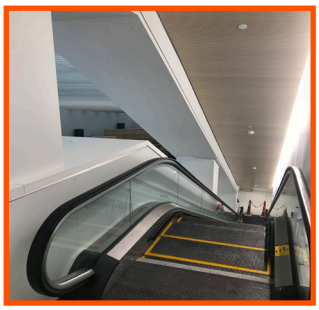
The Insertion or Setting Tool is used to punch the Keep-Nut into each drilled stone hole without using direct contact. This helps prevent potential damage to the surface of the stone from a mallet/hammer.

4 Threading in our 1" Allen Post with threadlocker to mount to Unistrut Framing System

Lami Wood wanted assurance that their posts would stay in the Keep-Nut Inserts for as long as possible. Chemical Concepts recommended using a 1/4-20 thread post with threadlocker at the base.

Completed Project





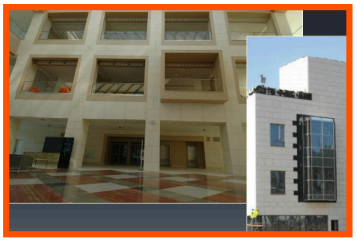
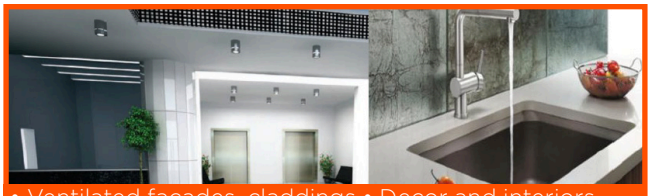
Just email us at sales@chemical-concepts.com or call us, toll-free, at 800-220-1966. We'll be happy to help!

Can your next project be made more successful by using the Keep-Nut anchoring system? Our experienced sales team will be happy to answer any questions that you might have.

- *Easy Installation*
- *Quick Assembly*
- *No Need for Adhesives*
- *Internal Assembly, meaning no awkward panels with posts sticking out.*
- *Crowns are designed to take axial force which reacts radially against the hole walls when pulled. This causes the crowns to flex, providing high strength without failing.*
- *The internal threading cannot be exceeded. This prevents you from threading too far into the insert which can cause an extraction effect and eventual failure.*

Similar Projects

Moscow International Business Center (Russia) • Azerbaijan Diplomatic Academy
Sheikh Abdullah Al Salem Culture Centre (Kuwait)

• Ventilated facades, claddings • Decor and interiors
• Furniture • Kitchen and sanitary elements

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