

INNOVATIVE FASTENING SYSTEM FOR STONE AND SOLID SURFACES:

THE KEEP-NUT

Export Department

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COMPANY BACKGROUND

- ✓ Specialinsert is an Italian company specialized in the manufacturing and trading of industrial fasteners.
- ✓ Since 1974 Specialinsert manufactures a wide range of products such as tubular threaded inserts, bushes for plastic materials, sold studs and self-clinching studs, etc.
- ✓ The company counts on an in-house research and development office, a technical laboratory, and a sales organization that supports the Italian, European and worldwide markets.
- ✓ Our main target is to meet our customers' needs, offering them advanced and high-quality products and the possibility to produce no-standard items.
- ✓ In the latest years Specialinsert focused on the new world of composites introducing innovative fastening systems for a very wide range of materials, from natural stone to carbon fiber.



COMPANY LOCATIONS

✓ Turin:

This headquarter hosts the administrative offices, the export department, an R&D workshop and a 3,000 sqm warehouse

✓ Milan:

Branch sales office and a 2,500 sqm warehouse

✓ Maerne (Venice):

2,500 sqm production plant, purchase department, quality and test laboratories, and a 3,000 sqm warehouse





PRODUCTION FACILITY

- ✓ 2,500 sqm. plant
- ✓ 3 production lines by cold forming process
- ✓ 9 production lines by turning process
- ✓ 1 CNC production line
- ✓ 13 tapping lines
- ✓ 1 heat treatment line
- ✓ 2 washing lines
- ✓ 1 packing line





MAIN PRODUCTS

- ✓ Inserts for metal sheets sections
- ✓ Inserts for solid parts
- ✓ Inserts for plastic
- ✓ Inserts for composites





FASTENERS APPLICATIONS



and hundreds more uses ...



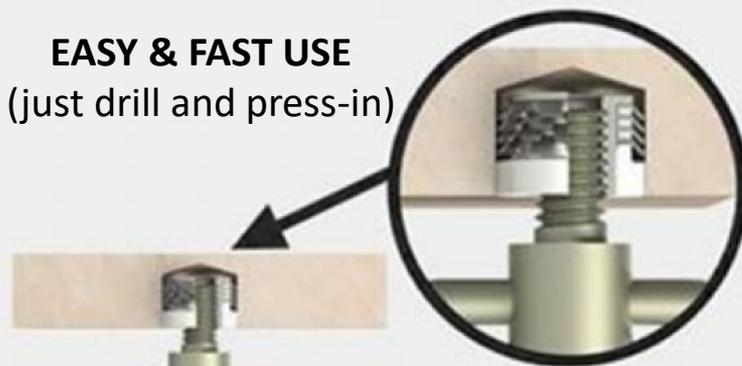
KEEP-NUT

- ✓ It's a revolutionary press-in insert with mechanical anchoring to create threaded seat on panels, even thin, made of marble, granite or other stone materials, and moreover on composite, carbon, Corian, HPL, glass and solid materials
- ✓ It is manufactured in stainless steel and it's made of a threaded bush with a set of elastic crowns and a plastic ring for holding the complete set of parts.
- ✓ **ETA 15/0615** - Fastener for the rear fixing of facade panels made of Ceramic (stoneware) according to EN 14411:2012

KEEP-NUT SERIES



EASY & FAST USE
(just drill and press-in)



HIGH TENSILE STRENGTH
(tested on most materials)





KEEP-NUT APPLICATIONS 1/2

- ✓ Ventilated facades, claddings
- ✓ Décor and interiors
- ✓ Furniture
- ✓ Kitchen and sanitary elements,
- ✓ Funerary arts ...

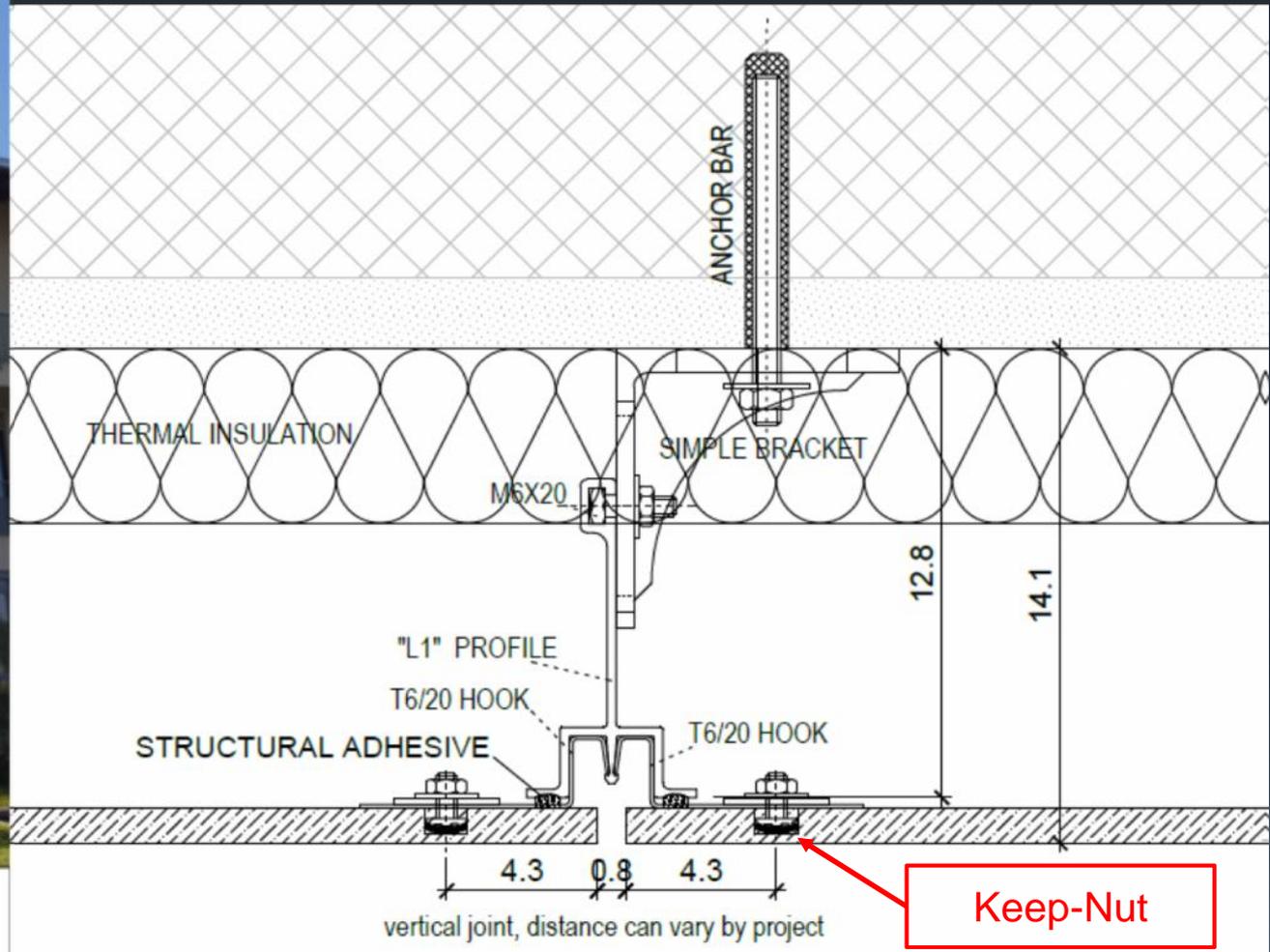




KEEP-NUT APPLICATIONS 2/2



Current façade project with hidden anchors





PROJECTS PORTFOLIO





PROJECTS PORTFOLIO





PROJECTS PORTFOLIO



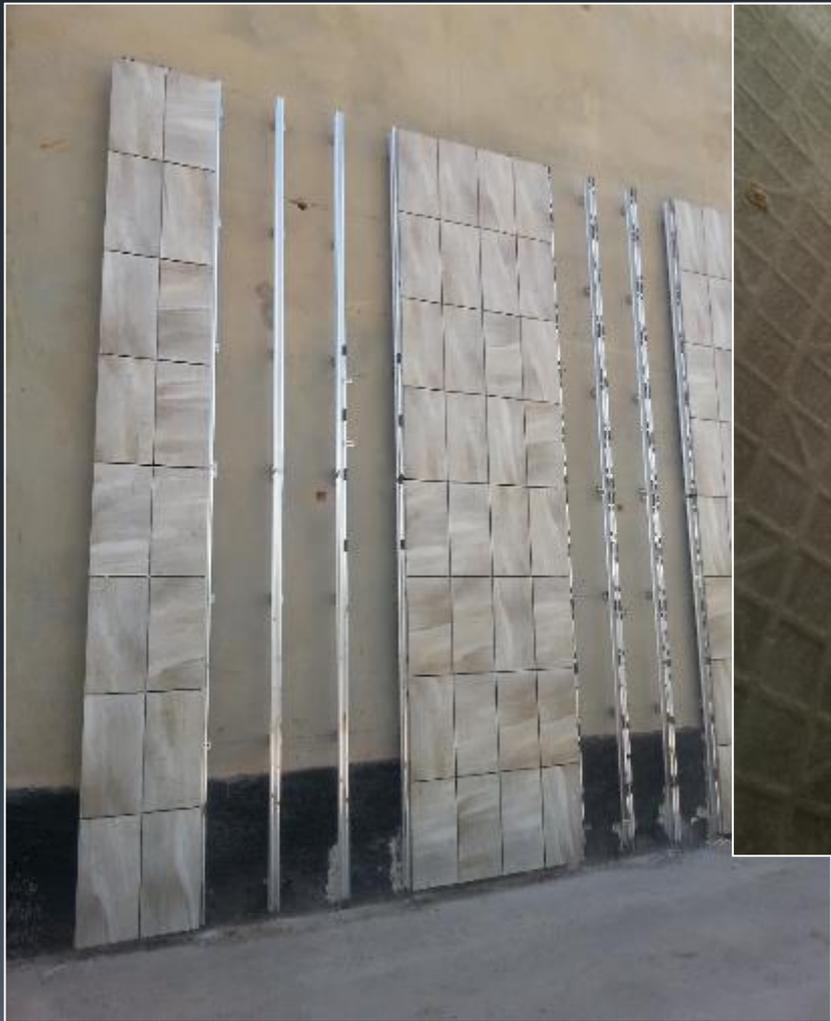


PROJECTS PORTFOLIO





PROJECTS PORTFOLIO





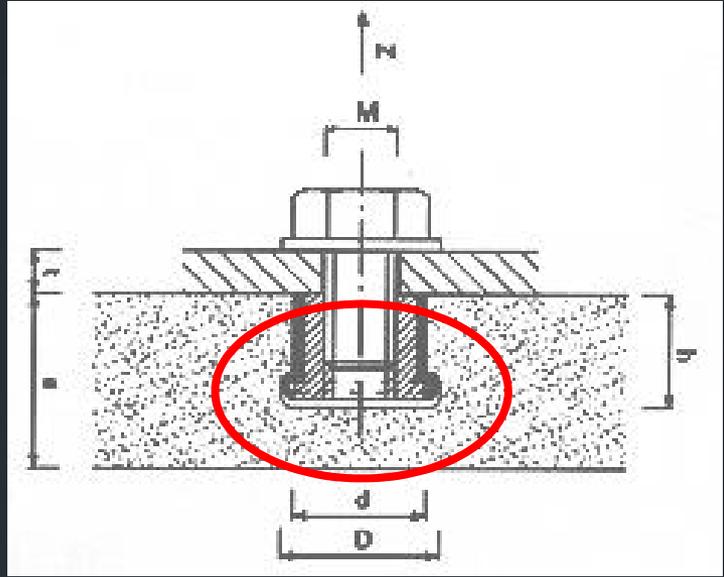
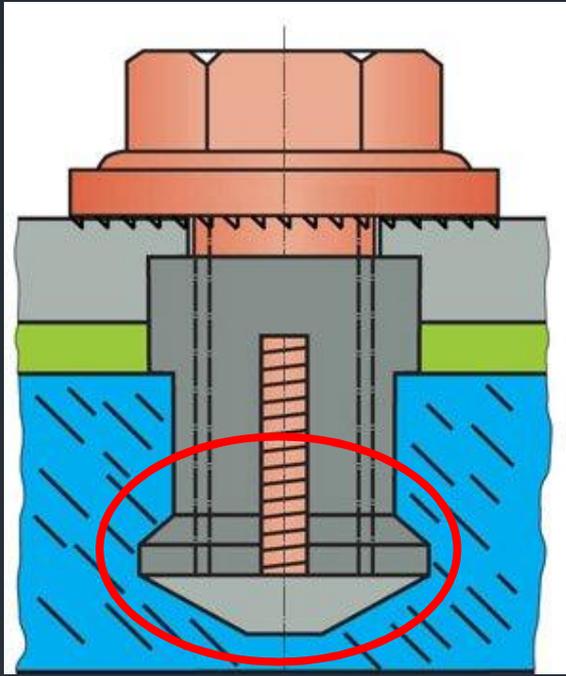
KEEP-NUT ADVANTAGES

1. Cylindrical hole easy to be drilled with standard tools
2. Quick assembly by pressure
3. No needs for resins or adhesives
4. Allow an internal assembly without any external dimensions, facilitating the handling and storage of panels
5. No tensile force on the receiving material when the insert is not pulled-out
6. On use the elastic crowns are solicited by an axial force, acting radially against the hole walls due to the bending and pressure, avoiding the leakage of the system
7. The «not through» threading of the bush, assures fastening without the extraction effect due to the possible exceeding length of the screw

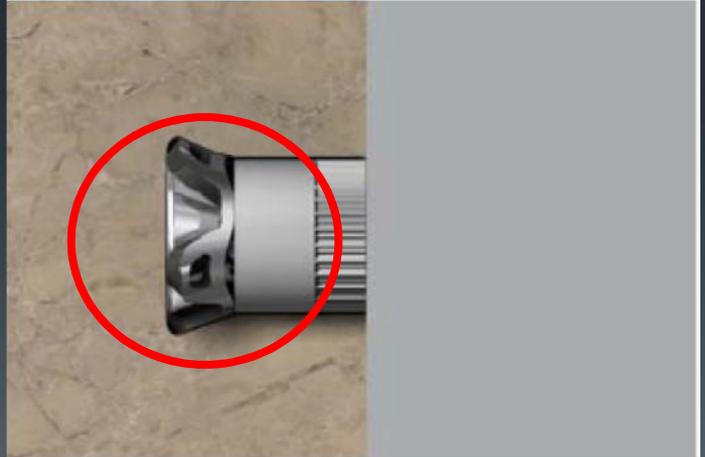




KEEP-NUT vs. COMPETITORS 1/2



UNDERCUT HOLE = MORE EXPENSIVE
AND COMPLEX DRILLING





KEEP-NUT vs. COMPETITORS 2/2

The following table compares the Keep-Nut self-anchoring insert with other three alternative inserts for stone/solid material panels

	Keep-Nut	KEIL	FISCHER	DOCIPA
Drilling cost (average per hole)	0,6 €	1,7 €	1,95 €	1,8 €
Cost for insert (average)	1,25 €	1,25 €	1,2 €	0,9 €
Assembly on site	Included	0,9 €	Included	Included
<u>Total</u>	1,85 €	3,85 €	3,15 €	2,7 €
N. of inserts for a 60x60cm panel	4	4	4	4
<u>Total cost for a 60x60cm panel</u>	7,4 €	15,4 €	12,6 €	10,8 €

Source: Carini/Martinelli – Industrial design and architectural technology thesis – Politecnico of Milan



TENSILE/PULL-OUT STRENGTH

The following table compares some test results made on different materials.
(*)Test made by Specialinsert lab under optimal conditions

Material	Type of Keep-nut	Average pull-out load on a single insert (Kgs.)*
Granite 20mm	IM4S/M6/H8.5	490
Marble 20mm	IM4S/M6/H8.5	385
Travertine 20mm	IM4S/M6/H8.5	225
Fibre cement (high density) 12mm	IM4S/M6/H8.5	275,0
Fibre cement (high density) 10mm	IM4S/M6/H8.5	239,0
Fibre cement (high density) 8mm	IM2S/M6/H6	125,5
HPL 12mm	IM4S/M6/H8.5	541,5
HPL 10mm	IM4S/M6/H8.5	611,5
HPL 8mm	IM2S/M6/H6	270,5
Corian 12mm	IM4S/M6/H8.5	484,5
Corian 10mm	IM2S/M6/H6	295
Agglomerate stone 15mm	IM4S/M6/H8.5	305
Tempered glass 5mm	IM1T/M4/H5	75





Application video

- Keep-Nut® by Specialinsert for wall cladding facades: <https://youtu.be/SXEls46gWPg>
- Keep-Nut® by Specialinsert for stones and solid surfaces: <http://youtu.be/ZNjvN-hG4zQ>

Brochure / Technical data

<http://www.specialinsert.it/repository/Cataloghi/KNS.pdf>



Thank you for your kind attention

Questions?

Please contact us at

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