

Taper-Threaded Terminators and Mechanical Anchors



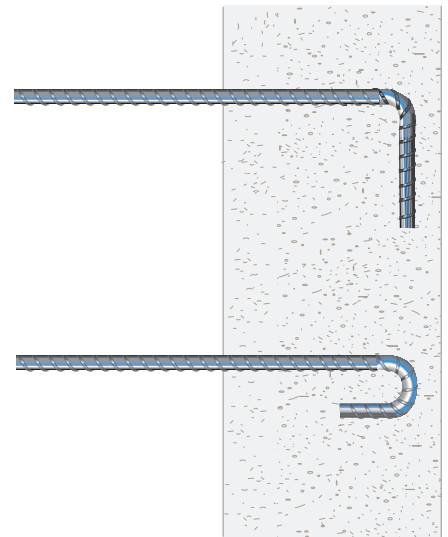
Hooked Rebar Anchorage vs. nVent LENTON Taper-Threaded Terminator

For many years, the traditional method of providing shear reinforcement and connecting roof/column and beam/column connections has been with hooked rebar anchorage. Many structural engineers, architects and specifiers have discovered this method of anchorage has very few advantages. Terminators, often called headed bars, create an anchorage within the concrete, simplifying placement and reducing congestion. Explore the reasons to consider the nVent LENTON Taper-Threaded Terminator — an efficient alternative for hooked rebar anchorage.

WHICH SYSTEM IS MORE RELIABLE AND ECONOMICAL?

Hooked Rebar Anchorage

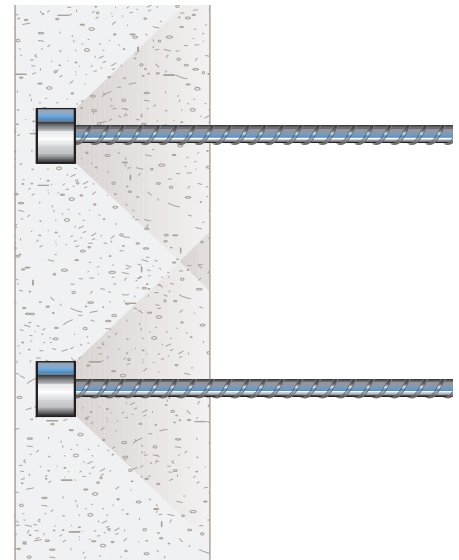
- Requires longer development lengths
 - Increases rebar congestion
 - Restricts flow of larger aggregates
- Hidden costs
 - The larger the bar, the longer the lap
- Inhibits rebar placement
 - Increases rebar placing costs
- Jeopardizes job site safety
 - Increases safety hazards through exposed rebar
- Restricts removal of column forms and shaft casings
 - Labor intensive



Vs.

nVent LENTON Taper-Threaded Terminator

- Eliminates rebar hook
 - Simplifies bar placement
- Minimizes development lengths
 - Reduces congestion
- Simplifies concrete placement
 - Better concrete consolidation
- More embedment options
 - Greater design flexibility
- Faster installation
 - Lowers in-place cost
- Standard product dimensions
 - Minimal detailing required



Reliable



Economical

Faster Rebar Placement & Reduced Rebar Congestion

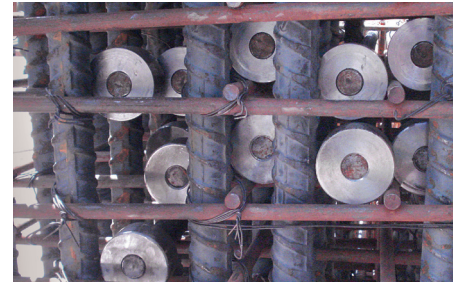
WHY nVENT LENTON TAPER-THREADED TERMINATOR?

Code changes have significantly increased the amount of rebar required, while at the same time, designers are striving for more compact structural elements. This results in rebar congestion and placement problems. Time-tested and field-proven, the nVent LENTON Taper-Threaded Terminator answers these challenges by eliminating the majority of rebar embedment lengths required, while reducing job site related labor hours.

The nVent LENTON Taper-Threaded Terminator provides an alternative to hooked rebar, anchor or stop nut for rebar passing through a pile plank or structural steel element. The front face of the Terminator is designed to carry the full tension load of the rebar when the anchor is bearing against concrete or structural steel.

nVent LENTON Taper-Threaded Terminators are designed for use in concrete with ASTM A615/A706, ENV10080, BS4449, AS3102, and other international grades of rebar in sizes 12 mm through 57 mm. The Terminator requires no special training, minimizes detailing and is ideal for all types of concrete construction projects. The system is supplied through a network of local rebar fabricators utilizing standard nVent LENTON equipment.

nVent LENTON Taper-Threaded Terminator is capable of developing the specified tensile strength of the reinforcing bar, as well as seismic and fatigue requirements in compliance with regional codes and performance specifications around the world.

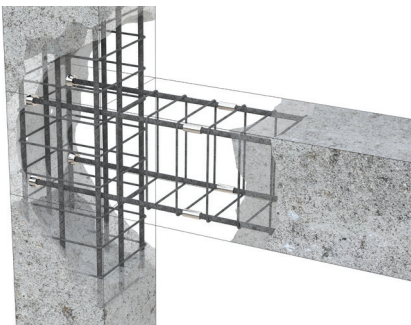


Applications

Terminators in Action



Beam/Column



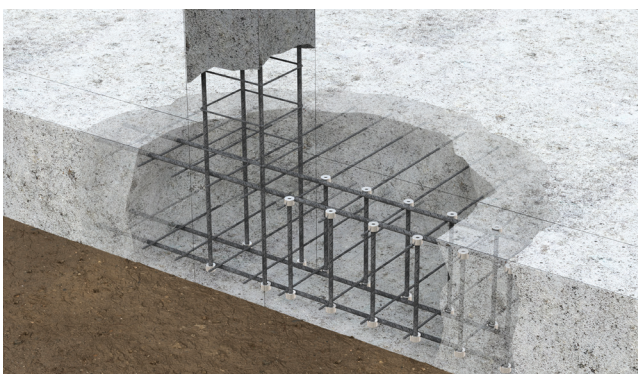
Roof/Column



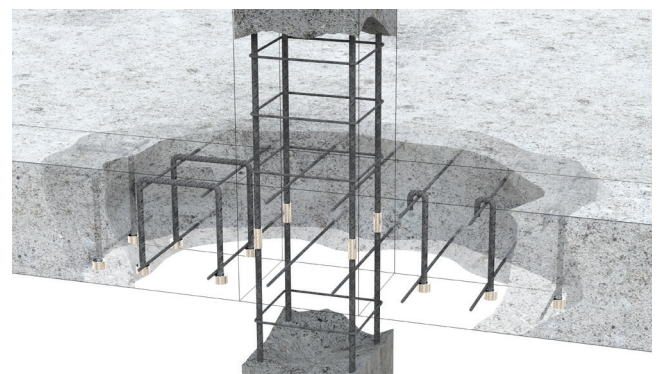
Piles/Caissons



Base Slabs/Shear Reinforcement



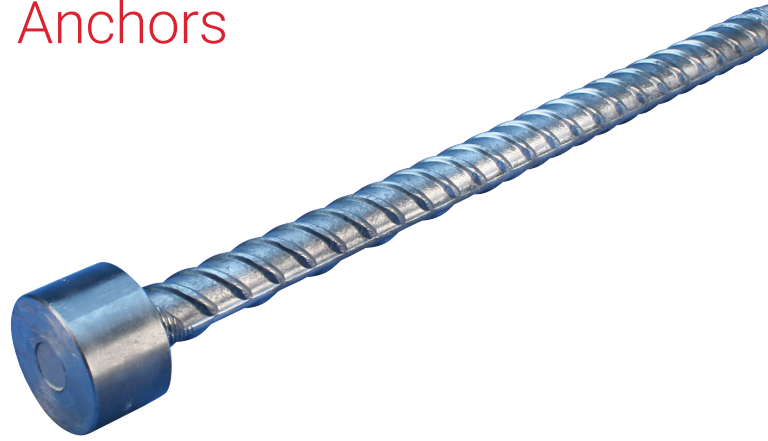
Intermediate Floor Slabs



Why nVent LENTON Taper-Threaded Terminator and Mechanical Anchors

UNIQUE TAPER-THREADED DESIGN

The nVent LENTON Taper-Threaded Terminator system utilizes the time-tested and field-proven nVent LENTON Taper Thread. Developed in 1974, this system has been installed worldwide with global capacity to support any sized project. With no lock nuts required, Terminators provide positive locking with a no-slip connection and prevent cross-threading.



PRODUCT PERFORMANCE

- Available in two size ranges: The D14 head area exceeds 10x bar area (net 9x) and the D16 head area exceeds 5x bar area (net 4x)
- Permanently secured, will not loosen or fall off during transportation or installation
- System is robust allowing for the inherent variability of rebar while maintaining the highest level of performance
- Terminators are designed to meet tensile, seismic and fatigue performance requirements around the world

INSTALLATION AND DESIGN BENEFITS

- Fast to install and takes only 4.5 turns
- No special tools required
- Taper-Thread allows the maximum bar cross section to be used
- No power required for installation
- Connection inspection is quick and easy
- Durability coatings available to increase longevity

QUALITY AND STRENGTH

nVent LENTON Taper-Threaded Terminators are manufactured from high-strength, high-quality steel. All manufacturing facilities are ISO 9001-2015 registered.

EQUIPMENT BENEFITS

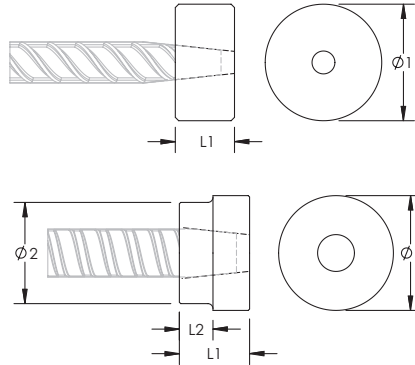
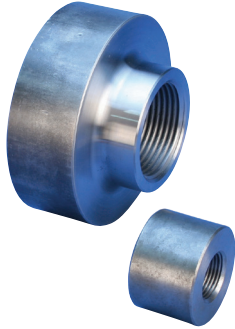
- Bar threaders are easy-to-use and can be set up on-site or at the fabricator
- Allows for prefabrication, saving time on the job site
- Threaders are designed to maximize operator safety, product performance and shop efficiency
- Operator training can be conducted in-person or online; training videos are available upon request



Scan the QR code to see more information about the nVent LENTON Headed Bar and Mechanical Design Aid Brochure.

Terminator

D16 MECHANICAL ANCHOR, PLAIN, WORLDWIDE DESIGN



- Replaces conventional hooked reinforcing bar
- Simplifies reinforcing bar placement and lowers placing costs
- Head area exceeds 5x bar area (net 4x)

Designed to Meet:
ACI 318;AS3600;ASTM A970

Finish: Plain
Material: Steel
Design Version: Worldwide (Globally Available Materials)



Catalog Number	Rebar Size, Metric	Diameter 1 Ø1	Diameter 2 Ø2	Length 1 L1	Length 2 L2	Unit Weight	Certifications
EL10D16N	10 mm	35 mm	–	18 mm	–	0.13 kg	–
EL12D16N	12 mm	35 mm	–	19 mm	–	0.12 kg	CARES, RISE
EL14D16N	14 mm	35 mm	–	22 mm	–	0.14 kg	CARES, RISE
EL16D16N	16 mm	36 mm	–	24 mm	–	0.16 kg	CARES, RISE
EL18D16N	18 mm	45 mm	–	30 mm	–	0.32 kg	–
EL20D16N	20 mm	45 mm	–	35 mm	–	0.37 kg	CARES, RISE
EL22D16N	22 mm	50 mm	–	38 mm	–	0.49 kg	–
EL25D16N	25 mm	60 mm	–	40 mm	–	0.76 kg	CARES, RISE
EL28D16N	28 mm	65 mm	–	42 mm	–	0.92 kg	–
EL30D16N	30 mm	70 mm	–	52 mm	–	1.34 kg	–
EL32D16N	32 mm	75 mm	–	46 mm	–	1.33 kg	CARES, RISE
EL34D16N	34 mm	80 mm	–	56 mm	–	1.86 kg	–
EL36D16N	36 mm	85 mm	80 mm	52 mm	25 mm	1.86 kg	–
EL38D16N	38 mm	85 mm	80 mm	54 mm	25 mm	1.87 kg	–
EL40D16WN	40 mm	80 mm	90 mm	57 mm	32 mm	2.11 kg	CARES
EL50TD16WN	50 mm	80 mm	115 mm	70 mm	45 mm	3.69 kg	CARES

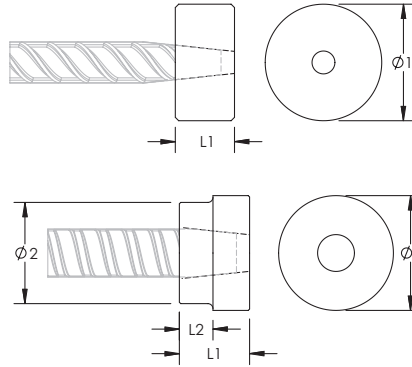
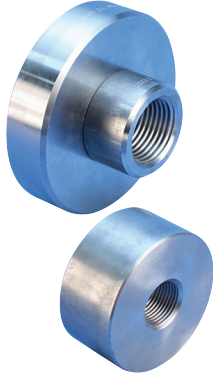
Bar dimensions and weights listed may vary by region. Coupler sizes not shown may be available by special order. Contact your nVent LENTON representative for more information.

Thread does not need to be flush with end of nVent LENTON Terminator. Thread may be +/-2 threads from backside of coupler.

For EL40D16WN and EL50TD16WN, Diameter 2 (Ø 2) is larger than Diameter 1 (Ø 1).

Terminator

D14 MECHANICAL ANCHOR, PLAIN, WORLDWIDE DESIGN



- Replaces conventional hooked reinforcing bar
- Simplifies reinforcing bar placement and lowers placing costs
- Head area exceeds 10x bar area (net 9x)

Designed to Meet:
ACI 318;AS3600;ASTM A970

Finish: Plain
Material: Steel
Design Version: Worldwide (Globally Available Materials)



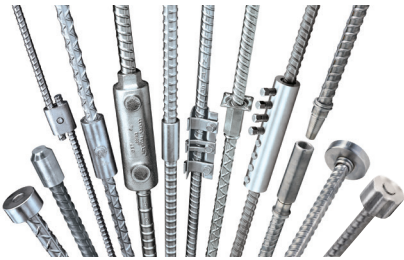
Catalog Number	Rebar Size, Metric	Diameter 1 Ø1	Diameter 2 Ø2	Length 1 L1	Length 2 L2	Unit Weight	Certifications
EL10D14N	10 mm	35 mm	–	18 mm	–	0.12 kg	AFCAB, DIBt, TZUS, ITB
EL12D14N	12 mm	45 mm	–	18 mm	–	0.21 kg	AFCAB, CARES, DIBt, TZUS, RISE, ITB
EL14D14N	14 mm	45 mm	–	21 mm	–	0.24 kg	AFCAB, CARES, DIBt, TZUS, RISE, ITB
EL16D14N	16 mm	55 mm	–	24 mm	–	0.41 kg	AFCAB, CARES, DIBt, TZUS, RISE, ITB
EL18D14N	18 mm	60 mm	–	29 mm	–	0.6 kg	TZUS, ITB
EL20D14N	20 mm	65 mm	–	35 mm	–	0.83 kg	AFCAB, CARES, DIBt, TZUS, RISE, ITB
EL22D14N	22 mm	70 mm	–	37 mm	–	1.03 kg	TZUS, ITB
EL25D14N	25 mm	80 mm	–	40 mm	–	1.43 kg	AFCAB, CARES, DIBt, TZUS, RISE, ITB
EL28D14N	28 mm	95 mm	80 mm	42 mm	25 mm	1.93 kg	DIBt, TZUS, ITB
EL30D14N	30 mm	95 mm	80 mm	52 mm	25 mm	2.48 kg	–
EL32D14WN	32 mm	80 mm	105 mm	45 mm	20 mm	2.11 kg	CARES
EL34D14N	34 mm	110 mm	80 mm	55 mm	25 mm	3.23 kg	–
EL36D14N	36 mm	115 mm	80 mm	52 mm	25 mm	3.16 kg	TZUS
EL38D14N	38 mm	120 mm	80 mm	53 mm	25 mm	3.49 kg	–
EL40D14WN	40 mm	80 mm	130 mm	57 mm	32 mm	3.82 kg	CARES
EL50TD14WN	50 mm	80 mm	160 mm	70 mm	45 mm	7.07 kg	CARES

Bar dimensions and weights listed may vary by region. Coupler sizes not shown may be available by special order. Contact your nVent LENTON representative for more information.

Thread does not need to be flush with end of nVent LENTON Terminator. Thread may be +/-2 threads from backside of coupler.

For EL32D14WN, EL40D14WN and EL50TD14WN, Diameter 2 (Ø 2) is larger than Diameter 1 (Ø 1).

A Look at nVent LENTON Concrete Reinforcement Products



WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at nVent.com/LENTON and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and/or death, and void your warranty.



ACI is a registered trademark of the American Concrete Institute.

ASTM is a registered trademark of ASTM International.

IAPMO is a registered trademark of the International Association of Plumbing & Mechanical Officials.

IBC and ICC are registered trademarks of the International Code Council.

UBC (Uniform Building Code) is a registered trademark of the International Conference of Building Officials.

We reserve the right to make any alterations to the information contained in this brochure which we consider to be either necessary or advantageous. This brochure is designed to provide only preliminary information on the products and is not a contract. The Company does not accept any liability for loss or damage arising from failure to follow its instructions to products not agreed by it.

nVent LENTON is a world leader in advanced mechanical rebar splicing systems. Our Rebar Splicing Specialists understand the reinforced concrete business and inherent rebar splicing challenges on today's job sites. nVent LENTON offers a wide range of Mechanical Splices for a wide variety of construction needs:

- nVent LENTON Taper-Threaded Splicing Systems – Ideal alternative to conventional lap splices
- Mechanical Anchors including nVent LENTON Terminator – Ideal alternative to hooked rebar anchorage and shear reinforcement
- nVent LENTON Ultimate Splicing Systems and Terminators – Ideal for high-strain, fatigue, seismic and nuclear performance requirements
- nVent LENTON Interlok Grout-Filled Precast Splicing System – Ideal for precast structures
- nVent LENTON Quick Wedge Lap Splicing System – Ideal for retrofit applications
- nVent LENTON Speed Sleeve Compression-Only Splices – Designed Only for compression applications in columns and walls
- nVent LENTON Cadweld – Ideal for curved rebar in nuclear containment structures
- nVent LENTON Connect Shear Bolt Splicing System – Ideal in situ construction
- nVent LENTON Swaged Terminator – Ideal alternative for high-volume headed bar terminators

As your rebar splicing specialist, nVent LENTON offers you the expertise you need for all your rebar splicing projects.

nVent Engineered Electrical & Fastening Solutions is a leading global manufacturer and marketer of superior engineered products for niche electrical, mechanical and concrete applications. These nVent products are sold globally under a variety of market-leading brands: nVent ERICO welded electrical connections, facility electrical protection, and rail and industrial products; nVent CADDY fixing, fastening and support products; nVent ERIFLEX low voltage power and grounding connections; and nVent LENTON engineered systems for concrete reinforcement. For more information on nVent ERICO, CADDY, ERIFLEX and LENTON, please visit nVent.com/LENTON.

TERMINATOR

How to Order:

To order the correct nVent LENTON Taper-Threaded Terminator for your construction applications, please contact your local nVent Customer Care Representative.

How to Specify:

Specific: Rebar terminations shall be nVent LENTON Taper-Threaded Terminator as manufactured by nVent.

Generic: The rebar terminations shall meet building code requirements, as required, by local norms/codes. The rebar terminations should be taper-threaded style of headed bar produced from high-quality steel. Terminators should be installed to the manufacturer's requirements. The Terminators shall be manufactured using registered quality systems around the world.



North America

Tel +1.800.248.2677

LENTON-OrderSupportEast@nVent.com

LENTON-OrderSupportWest@nVent.com

Europe

Tel +311.35835100

lentonspecialistemea@nVent.com

Middle East

Tel +971.506.255.903

Africa

Tel +31.13.5385.440

Latin America

Tel +55.3686-9785

LA-cotizaciones@nVent.com

Australia

Tel +61.2.9751.8500

ausorders@nVent.com



Our powerful portfolio of brands:

CADDY

ERICO

HOFFMAN

ILSCO

RAYCHEM

SCHROFF