

BEKAERT

better together

Post Tensioning Strands

Made in America. Made to Span a Century.

Benefits

- ① 100% USA made & melt
- ② ASTM, PTI & FIB compliant
- ③ 100-year design life

Bekaert's uncoated or galvanized strands are the ideal component for large post-tensioned concrete structures such as bridges, parking structures, and high-rise buildings. We manufacture our steel 7-wire strands with expertise in compliance with ASTM, PTI and FIB standards. Bekaert strands achieve excellent fatigue strength, allowing for innovative installation design. Our products are 100% Made and Melt in America, and we assure superior quality for any Federal, State or private application.

Superior corrosion resistance

Corrosion is one of the major cause of failure in post-tensioned structures. Zinc galvanized post-tensioning strands by Bekaert feature superior corrosion resistance without compromising fatigue strength. Bekaert's strands are designed and produced to meet the 100-year design life of cable stay bridges. To meet the required lifetime, the strands combine excellent mechanical properties with advanced corrosion protection:

Chloride Tolerance

The chloride tolerance of galvanized reinforcement is >10x higher than black steel delaying the onset of steel corrosion significantly.

Carbonation Tolerance

The pH around black steel can drop to <11.5 su causing it to depassivate. Galvanized coatings can maintain passivation, by keeping the pH down to 8 su.



Why choose Bekaert?

Your wire transformation and coating specialist

No matter what shape, composition or mechanical characteristic your steel wire application requires, with over 135 years of experience, we have the flexibility and technical know-how to comply.

The experienced producer of steel wire building products

Whatever your design is, we can help you build it. Our wire solutions for the construction industry include a wide selection of strands, fibers, meshes, fences and customized products.

Customer-driven innovation

Together with customers and independent research partners, we are able to create new solutions that keep up with industries' evolving needs. Our in-house engineering department develops machinery, testing and process equipment to bring those new products to reality.

Developing your business together

As a global leader in wire transformation and coating technologies, Bekaert has the ability to collaborate with clients and end users to develop unique solutions for innovative post tensioning technologies. We have experience in working with owners, design engineers, and construction contractors to reduce cost, increase safety, manage environmental impact, and extend the overall life-cycle of your structure through product innovation. Consider Bekaert as a partner for applications that demand a high level of performance with efficient results.

Product Specifications

Nominal diameter	0.5"	0.6"
Nominal section	0.153 in ²	0.217 in ²
Tensile strength	270 ksi	270 ksi
Breaking load	41,300 pounds	58,600 pounds
Elongation at break	≥ 3.5% in 24" gauge length	≥ 3.5% in 24" gauge length
Maxi. Relaxation at 100 hr.s at 20°C	<2.5% (initial tension at 0.7 GUTS)	<2.5% (initial tension at 0.7 GUTS)
Elastic Modulus	28.57 MPsi ±5%	28.57 MPsi ±5%
Coating	Uncoated or Class A 0.1 oz to 1oz	Uncoated or Class A 0.1 oz to 1oz

Packaging

- Coils*
- Cal-Wrap rust-free wrapping
- Custom packaging on request

*Contact Bekaert for dimensions



INCREASING BRIDGE LIFE IN FRIGID WEATHER

THE HUDSON'S HOPE BRIDGE, BRITISH COLUMBIA, CANADA

Challenge

The Hudson's Hope Bridge is a 680 ft. suspension span, post-tensioned with 70-strand tendons. Built in 1965, the existing uncoated steel strands corroded severely only 50 years later, threatening the life cycle of the bridge structure. The British Columbia Department of Highways decided to perform a renovation of the bridge to extend its effective usage.

Solution

After rigorous testing and analysis, government officials elected to fully replace the bridge tendons with galvanized strands produced by Bekaert. The new material proved fit for the frigid weather and was installed successfully to increase the life cycle of the bridge.

Contact us

More
Information?

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