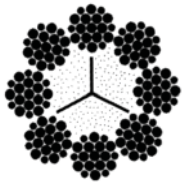
Bethlehem 8-Strand & 6-Strand Elevator Ropes

Wirerope Works, Inc. manufactures Bethlehem Standard Elevator Rope in a variety of diameters, constructions, lays, and grades.

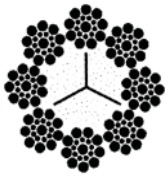
8 x 19 Standard Elevator Rope Technical Data

Diameter		8 x 19 Class (8x19 Warrington, 8x19 Seale, 8x19 Filler Wire, 8x25 Filler Wire)			
		Approx. Wt. (lb/ft)	Nominal Strength (lb)		
in	mm		Iron	Traction	EHS Traction
1/4	6.5	0.09	1,800	3,600	4,500
5/16	8.0	0.14	2,900	5,600	6,900
3/8	9.5	0.20	4,200	8,200	9,900
7/16	11.0	0.28	5,600	11,000	13,500
1/2	13.0	0.36	7,200	14,500	17,500
9/16	14.5	0.46	9,200	18,500	22,100
5/8	16.0	0.57	11,200	23,000	27,200
11/16	17.5	0.69	-	27,000	32,800
3/4	19.0	0.82	16,000	32,000	38,900
13/16	20.6	0.96	-	37,000	46,000
7/8	22.0	1.11	21,400	42,000	52,600
15/16	23.5	1.27	-	48,000	60,000
1	26.0	1.45	28,000	54,000	68,400
1-1/16	27.0	1.64	-	61,000	77,000

For information about sizes larger than 1-1/16” contact your ALP Sales Representative.

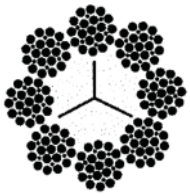


8 x 19 Warrington
through 7/16” diameter

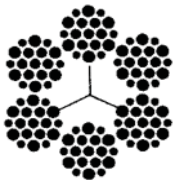


8 x 19 Seale
3/8” diameter and larger

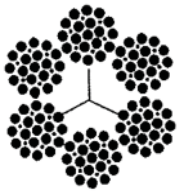
8 x 21 Filler Wire
1/2” diameter and larger



8 x 25 Filler Wire
1/2” diameter and larger



6 x 19 Warrington
through 5/16” diameter



6 x 25 Filler Wire
3/8” diameter and larger

6 x 19 Standard Elevator Rope Technical Data

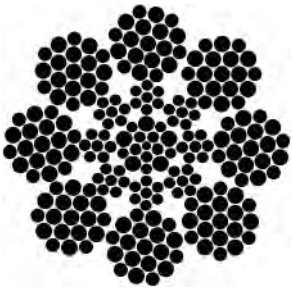
Diameter		6 x 19 Class (6x19 Warrington, 6x25 Filler Wire)			
		Approx. Wt. (lb/ft)	Nominal Strength (Tons)		
in	mm		Iron	Traction	EHS Traction
1/4	6.5	0.10	2,200	3,600	6,200
5/16	8.0	0.16	3,200	5,600	8,100
3/8	9.5	0.23	5,000	8,200	11,600
7/16	11.0	0.31	6,400	11,000	15,700
1/2	13.0	0.40	8,400	14,500	20,400
9/16	14.5	0.51	10,600	18,500	25,700
5/8	16.0	0.63	12,800	23,000	31,600
11/16	17.5	0.76	15,500	27,000	38,200
3/4	19.0	0.90	18,200	32,000	45,200
13/16	20.6	1.06	21,500	37,000	52,900
7/8	22.0	1.23	24,800	42,000	61,200
15/16	23.5	1.41	28,500	48,000	70,000
1	26.0	1.60	32,000	54,000	79,500
1-1/16	27.0	1.81	-	61,000	89,400

For information about sizes larger than 1-1/16” contact your ALP Sales Representative.

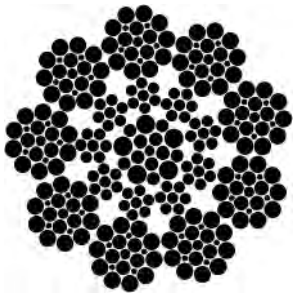
Bethlehem 8-Strand & 9-Strand IWRC Elevator Hoist Ropes

Steel Core Elevator Hoist Ropes are used where additional strength is required without increasing the diameter of the wire rope. An additional benefit of the steel core is that these ropes will exhibit somewhat reduced stretch when compared with that of fiber core ropes.

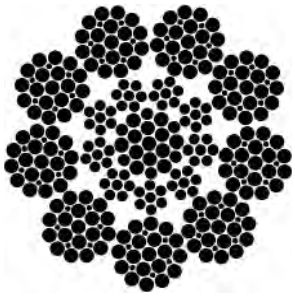
Equipment utilizing steel core elevator hoist ropes are specifically designed with the steel core in mind. Steel core ropes should not be used on equipment designed for fiber core ropes. Likewise fiber core ropes should not be used on equipment designed for steel core ropes.



10 mm 8x19 Warr BRT EHS RR FS IWRC



1/2" 9x21F BRT EHS RR FS IWRC



16 mm 9x25F BRT EHS RR FS IWRC

Elevator Hoist Ropes with Steel Core (IWRC)

Diameter		Construction	Approx. Wt. (lb/ft)	Nominal Strength (lb)	Load on Rope	Diameter Tolerance		Out-of-Round Tolerance
in	mm					Min.	Max.	
5/16	8	8x19 Warr BRT EHS RR FS IWRC	0.184	9,740	010%	0%-1%	3%2%	2.5%1.5%
	10	8x19 Warr BRT EHS RR FS IWRC	0.285	15,220	010%	0%-1%	3%2%	2.5%1.5%
1/2	12.7	9x21F BRT EHS RR FS IWRC	0.473	23,820	010%	0%-1%	3%2%	2.5%1.5%
	13	9x21F BRT EHS RR FS IWRC	0.486	25,200	010%	0%-1%	3%2%	2.5%1.5%
5/8	16	9x25F BRT EHS RR FS IWRC	0.729	39,120	010%	0%-1%	3%2%	2.5%1.5%
3/4	19	9x25F BRT EHS RR FS IWRC	1.021	55,200	010%	0%-1%	3%2%	2.5%1.5%

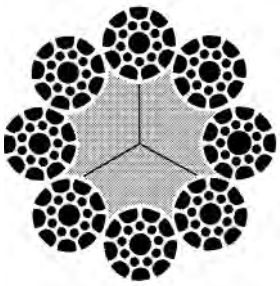
Bethlehem Liftpac Elevator Rope

Liftpac is designed for use wherever elevator hoist ropes exhibit short service life. Liftpac is recommended for those applications where 1) adverse operating conditions exist, such as where loads and groove pressures are high; 2) reverse bends exist, and/or; 3) fatigue breakage with minimal surface wear is the primary factor for retirement.

Liftpac is not designed to remedy poor rope performance due to worn sheaves and/or differential groove depths. Under these conditions, unsatisfactory rope performance will still result.

Liftpac Elevator Rope Technical Data

Diameter		Liftpac		
		Approx. Wt. (lb/ft)	Nominal Strength (lb)	
in	mm		Traction	EHS Traction
3/8	9.5	0.23	9,000	11,000
1/2	13.0	0.39	16,000	19,400
5/8	16.0	0.62	25,400	30,800



FEATURES

Fatigue Resistance - The compacted strand surface minimizes the interstrand and interlayer nicking that takes place in elevator ropes, dramatically decreasing the amount of internal breaks. This reduction of internal wire breakage can also be expressed as an increase in reserve strength. By decreasing internal breakage at the interstrand contact points, Liftpac maintains its strength longer than standard elevator rope in severe bending applications.

Abrasion Resistance - Liftpac's compacted strand design provides improved abrasion resistance when compared with 8-strand ropes because of the increased wire and strand surfaces contacting the sheaves and drums.

Resistance To Diameter Reduction - Liftpac's compacted design resists diameter reduction due to the higher metallic content and less core deterioration at the strand contact area.

Noise Reduction - Liftpac's compacted surface passes smoothly over drums and sheaves, allowing for an extremely quiet running rope.

INSPECTION

Due to Liftpac's compacted strands, its slightly flattened crown appearance should not be misconstrued as wear. Two methods may be used during inspection to make a distinction between Liftpac and a standard worn rope.

1) Check the outer wires in the strand valleys. The crown wires of a worn standard rope will obviously be abraded or worn. As these wires travel into the valleys, however, they resume their normal rounded shape. The wires in a Liftpac rope retain their die drawn state throughout the crown and valleys.

2) Check the ropes at the shackles. If Liftpac is being used, the rope wires at the shackles will have the same flattened crown appearance. If the standard rope is worn, the rope wires at the shackles will be rounded.

ASME and CAN/CSA inspection and removal criteria apply.