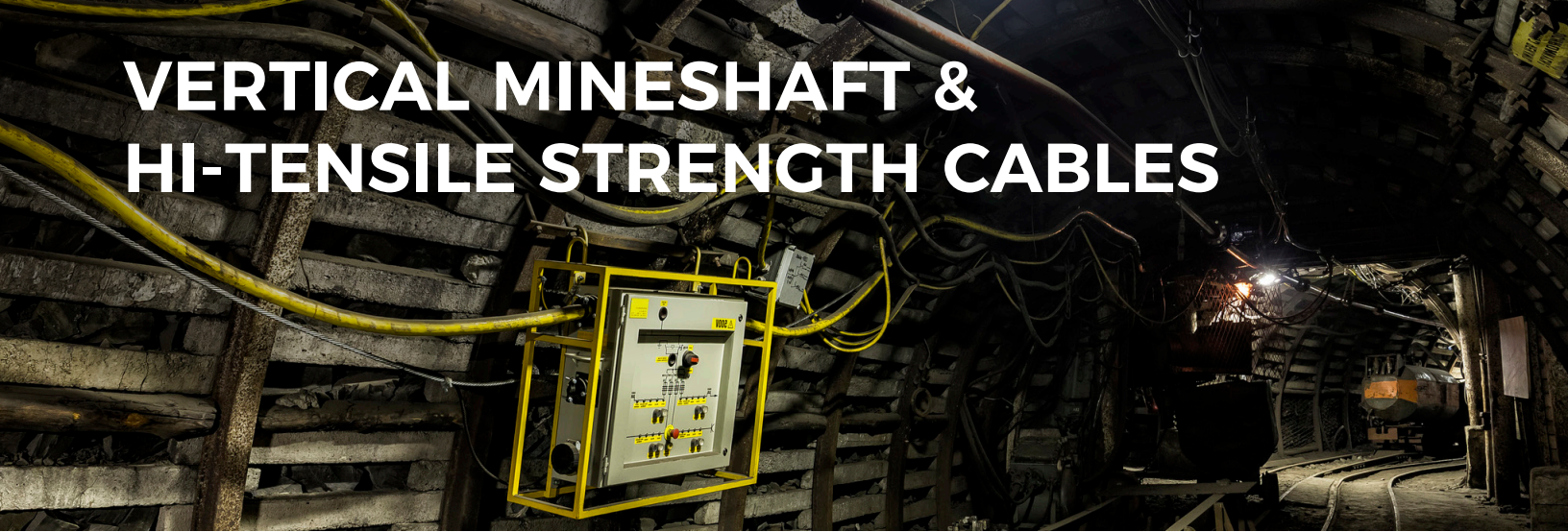


# VERTICAL MINESHAFT & HI-TENSILE STRENGTH CABLES



Shawflex Vertical Mineshaft cables are designed to prevent cable core slippage and are suitable for use in vertical installation and for environments that require self-supporting lengths. Typically used in Mineshafts, Tall Commercial Buildings, Inclined Tunnels and Vertical Cable Trays.

**Vertical Mineshaft** cables include a galvanized steel interlocked armour imbedded into a ribbed inner-jacketed core to prevent the core from slipping once the cable is installed.

**Hi-Tensile Strength Mineshaft** cables additionally include high strength galvanized steel cables for longer self-supporting lengths.

Shawflex Vertical Mineshaft cables are available as CSA Type TECK 90, CSA Type ACIC, UL Type MC Metal Clad, UL Type ITC/PLTC, or a custom design.

## Product Construction

### Insulation:

- CSA: XLPE, RW90 rated, 90°C wet/90°C dry
- UL: XLPE, XHHW-2 rated, 90°C wet/90°C dry

### Inner Jacket:

- CSA FR PVC, ribbed: 90°C to -40°C
- UL FR PVC, ribbed: 90°C to -25°C

### Armour:

- Steel interlocked armour (SIA), galvanized

### Hi-Tensile Strength Members (optional):

- Steel cables, galvanized, individually PVC jacketed

### Outer Jacket:

- CSA FR PVC: 90°C to -40°C
- UL FR PVC: 90°C to -25°C

### Available in:

- Variable Frequency Drive (VFD)
- Composite constructions
- Aluminum conductors
- Optional components include communication, fiber optic, coaxial



# VERTICAL MINESHAFT & HI-TENSILE STRENGTH CABLES

MINESHAFT CABLE TYPE	CSA TYPE TECK 90	CSA TYPE ACIC	UL TYPE MC	UL TYPE ITC / PLTC
Product standard				
Standard	CSA C22.2 No. 131	CSA C22.2 No. 239	UL 1569	UL 2250, 13
Voltage rating and conductor sizes				
300 V	-	20 - 14 AWG	-	22 - 12 AWG
600 V	14 AWG - 2000 kcmil	18 - 4/0 AWG	14 AWG - 2000 kcmil	-
1000 V	14 AWG - 2000 kcmil	18 - 4/0 AWG	14 AWG - 2000 kcmil	-
2000 V	-	-	14 AWG - 2000 kcmil	-
5000 V	8 AWG - 2000 kcmil	-	-	-
Characteristics				
FT4 / IEEE 1202 Flame Rating	●	●	●	●
-40°C Cold Impact & Bend	●	●	-	-
Sunlight Resistant	●	●	●	●
AG14 Low Acid Gas	●	●	-	-
Direct Burial	●	●	●	●
- HL Hazardous Locations	●	●	-	-

## LONGEST VERTICAL RUNS

### Long: Standard armoured cable

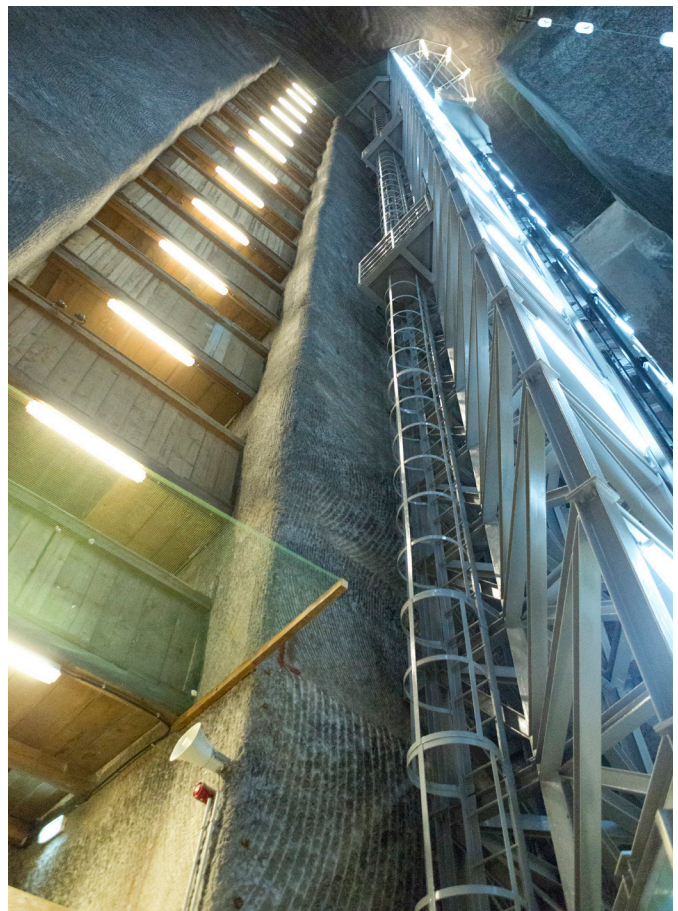
Unsupported vertical runs of armoured cables such as TECK90 are limited to maximum distances as prescribed by the Canadian Electrical Code, Part 1.

### Longer: Vertical Mineshaft cable

Self-supporting lengths are extended by including a galvanized steel interlocked armour imbedded into a ribbed inner-jacketed to prevent the core from slippage.

### Longest: Hi-Tensile Strength Mineshaft cable

Self-supporting lengths are maximized by also incorporating high strength galvanized steel cables: overcoming the limitations of circuit conductor strength.



# VERTICAL MINESHAFT & HI-TENSILE STRENGTH CABLES

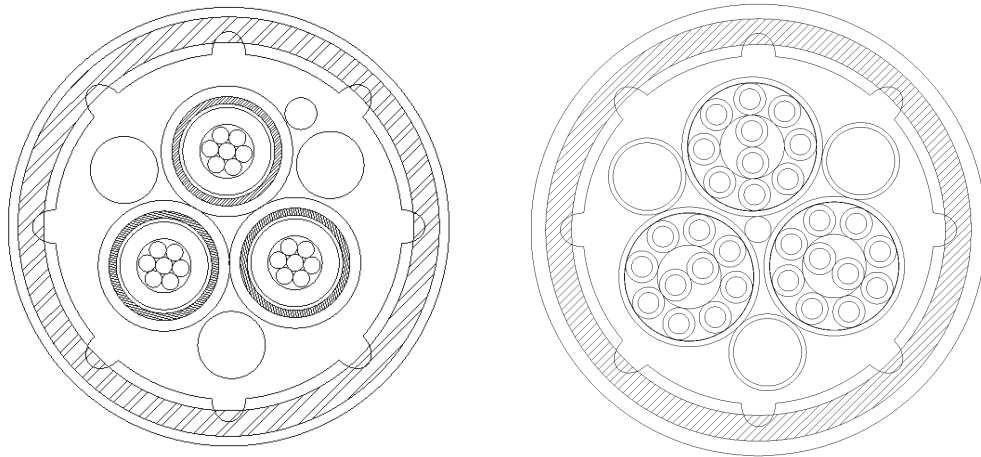
## EXAMPLES: EXTENDING SELF-SUPPORTING LENGTHS

NO. OF CONDUCTORS	CONDUCTOR SIZE	VOLTAGE RATING	MAXIMUM SELF-SUPPORTING LENGTH					
			STANDARD <sup>1</sup>		VERTICAL MINESHAFT <sup>2</sup>		HI-TENSILE STRENGTH MINESHAFT <sup>3</sup>	
			METRES	FEET	METRES	FEET	METRES	FEET
50C	14 AWG	600 V	30	98	164	538	765	2510
9C	8 AWG	1000 V	30	98	505	1657	620	2034
3C	4 AWG	600 V	30	98	144	472	340	1116
3C	3/0 AWG	1000 V	24	79	262	860	369	1211
3C	500 kcmil	600 V	12	39	318	1043	394	1293

1. See the Canadian Electrical Code, Part I, Rule 12-120 for details.
2. Maximum length based on pulling on conductors with the use of a pulling eye and swivel.
3. Longer lengths are possible by increasing steel cable size.

## HIGHLY BESPOKE CONSTRUCTIONS - MULTITUDE OF CONFIGURATIONS

Shawflex will work alongside you to understand your requirements and design the optimal cable for your application.



To know more about our products and service capabilities, contact our team today or visit [shawflex.com](http://shawflex.com).

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