# Surfix Cable

ABERDARE CABLES
Driven by Powertech



**Cable Description**
Copper conductors to SANS 1411 Part 1, PVC insulated to SANS 1411 Part 2 , laid up with a bare tinned copper earth wire in contact with a longitudinal aluminium/polyethylene laminate, UV stable PVC sheathed to SANS 1411 Part 2.

**Installation Information**
Complies with SANS 10142 "Code of Practice for wiring of Premises" Section 6:
- Surface wiring
- Under-plastering wiring
- Wiring in hollow walls
- Wiring in roof spaces

Note: The cable shall not be buried direct in concrete or in screed. Joints in the wiring shall be in boxes only.

**Properties**

| | | |
|---|---|---|
| Specification | : | SANS 1507-2 |
| Temperature Range | : | -10°C to 70°C |
| Voltage Rating | : | 300 / 500 V |
| Sheath Identification | : | White & Black |
| Core Identification | : | **2 Core** - Red & Black, **3 Core** - Red, Yellow, Blue, **4 Core** - Red, Yellow, Blue, Black |
| Packaging | : | 100m shrink-wrapped coils |
| | : | Available on 500 & 1000 metre wooden drums on request (depending on size) |

## Technical Data

| Cable Size * | | Electrical Properties | | | | | Physical Properties | |
|---|---|---|---|---|---|---|---|---|
| | | Conductor Resistance (dc @ 20°C) | | Current Rating ** | Volt Drop *** | 1 Sec Short Circuit Rating | Approx. Overall Diameter | Approx. Cable Mass |
| Phase | Earth | Phase | Earth | | | | | |
| ($mm^2$) | | (Ω/km) | | (A) | (mV/A/m) | (kA) | (mm) | (kg/100m) |
| **2 Core** | | | | | | | | |
| 1,5 | 1 | 12,1 | 18,2 | 17 | 29 | 0,14 | 7,8 | 10,6 |
| 2,5 | 1,5 | 7,41 | 12,2 | 23 | 18 | 0,24 | 8,8 | 14,4 |
| 4 | 1,5 | 4,61 | 12,2 | 30 | 11 | 0,38 | 10,1 | 20,8 |
| 6 | 2,5 | 3,08 | 7,56 | 38 | 7,3 | 0,58 | 11,3 | 25,7 |
| **3 Core** | | | | | | | | |
| 1,5 | 1 | 12,1 | 18,2 | 15 | 25 | 0,14 | 8,0 | 10,9 |
| 2,5 | 1,5 | 7,41 | 12,2 | 20 | 15 | 0,24 | 9,3 | 15,7 |
| 4 | 1,5 | 4,61 | 12,2 | 27 | 9,5 | 0,38 | 10,8 | 21,0 |
| 6 | 2,5 | 3,08 | 7,56 | 34 | 6,4 | 0,58 | 12,0 | 28,7 |
| **4 Core** | | | | | | | | |
| 1,5 | 1 | 12,1 | 18,2 | 15 | 25 | 0,14 | 8,7 | 13,3 |
| 2,5 | 1,5 | 7,41 | 12,2 | 20 | 15 | 0,24 | 10,2 | 19,3 |
| 4 | 1,5 | 4,61 | 12,2 | 27 | 9,5 | 0,38 | 11,8 | 26,5 |
| 6 | 2,5 | 3,08 | 7,56 | 34 | 6,4 | 0,58 | 12,8 | 33,5 |

**Note:**
* Conductors larger than 2,5$mm^2$ are usually stranded.
** Maximum conductor temperature 70° C, and installed as per installation Method 3 of SANS 10142-1.
*** 2 Core - Volt drop is phase to Neutral (ie. Single-phase).
3 and 4 Core - Volt drop is phase-to-phase. (ie. Three phase AC).