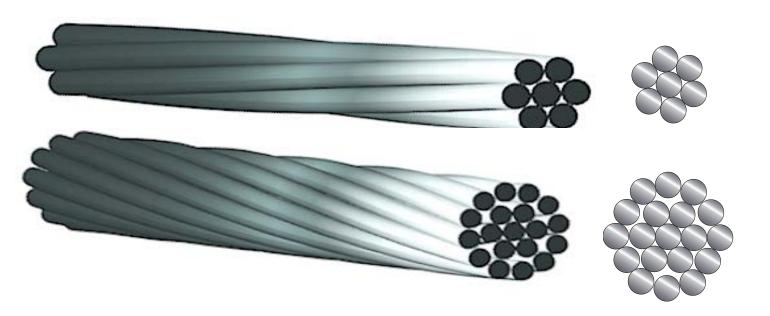


AERIAL AAC / 1350 BS STANDARD ABOVE 250mm<sup>2</sup>



**APPLICATION** 

7 and 19 strand construction is suitable for bare overhead reticulation of medium spans, normally at low and medium voltages.

37 and 61 strand construction is suitable for transmission and subtransmission lines for short span projects. Also used as flexible bus bar

AAC = All Aluminium Conductor.

STANDARD BS 215 Part 1:1970

**CONDUCTOR** Aluminium Alloy 1350

STRAND CONSTRUCTION As Below

| Code Name | Code Name Conductor Aluminium |                  | Nominal<br>Overall<br>Diameter<br>mm | Approximate<br>Mass<br>kg/km | Calculated<br>Min<br>Breaking<br>Load | Final<br>Modulus of<br>Elasticity | Coefficient<br>of Linear<br>Expansion | Max.<br>Packing |
|-----------|-------------------------------|------------------|--------------------------------------|------------------------------|---------------------------------------|-----------------------------------|---------------------------------------|-----------------|
|           | Area<br>mm²                   | Makeup<br>No./mm |                                      |                              | kN                                    | GPa                               | /° x 10 <sup>-5</sup>                 | m               |
| Cockroach | 265.7                         | 19/4.22          | 21.1                                 | 731                          | 40                                    | 56                                | 23                                    | 2000            |
| Butterfly | 322.7                         | 19/4.65          | 23.3                                 | 888                          | 49                                    | 56                                | 23                                    | 1500            |
| Moth      | 373.2                         | 19/5.00          | 25.0                                 | 1026                         | 56                                    | 56                                | 23                                    | 1500            |
| Drone     | 372.4                         | 37/3.58          | 25.1                                 | 1027                         | 58                                    | 56                                | 23                                    | 1000            |
| Centipede | 415.2                         | 37/3.78          | 26.5                                 | 1145                         | 63                                    | 56                                | 23                                    | 1000            |
| Locust    | 428.7                         | 19/5.36          | 26.8                                 | 1180                         | 64                                    | 56                                | 23                                    | 1000            |
| Maybug    | 486.1                         | 37/4.09          | 28.6                                 | 1340                         | 74                                    | 56                                | 23                                    | 1000            |
| Scorpion  | 529.8                         | 37/4.27          | 29.9                                 | 1461                         | 80                                    | 56                                | 23                                    | 1000            |
| Cicada    | 628.3                         | 37/4.65          | 32.6                                 | 1732                         | 95                                    | 56                                | 23                                    | 1000            |
| Tarantula | 749.9                         | 37/5.23          | 36.6                                 | 2192                         | 120                                   | 56                                | 23                                    | 1000            |

| CONDUCTOR | ELECTRICAL CHARACTERISTICS        |                                   |                           |                |                                   |  |  |  |  |  |
|-----------|-----------------------------------|-----------------------------------|---------------------------|----------------|-----------------------------------|--|--|--|--|--|
| CODE NAME | Equivalent<br>Electrical<br>Areas | Maximum DC<br>Resistance<br>@20°C | Current Ratings @<br>75°C |                | Inductive<br>Reactance to<br>0.4m | Single Phase<br>Voltage Drop @<br>0.4m spacing<br>mV/A.m |  |  |  |  |
|           | Aluminium<br>mm²                  |                                   | Winter<br>Night           | Summer<br>Noon |                                   |  |  |  |  |  |
|           |                                   | Ω/km                              | Α                         | Α              | Ω/km                              |  |  |  |  |  |
| Cockroach | 265.7                             | 0.108                             | 893                       | 735            | 0.260                             | 0.585  |  |  |  |  |
| Butterfly | 322.7                             | 0.089                             | 1010                      | 829            | 0.254                             | 0.554  |  |  |  |  |
| Moth      | 373.2                             | 0.077                             | 1110                      | 909            | 0.250                             | 0.534  |  |  |  |  |
| Drone     | 372.4                             | 0.077                             | 1111                      | 910            | 0.250                             | 0.533  |  |  |  |  |
| Centipede | 415.2                             | 0.069                             | 1187                      | 970            | 0.245                             | 0.520  |  |  |  |  |
| Locust    | 428.7                             | 0.067                             | 1212                      | 990            | 0.245                             | 0.518  |  |  |  |  |
| Maybug    | 486.1                             | 0.059                             | 1317                      | 1074           | 0.240                             | 0.503  |  |  |  |  |
| Scorpion  | 529.8                             | 0.054                             | 1383                      | 1126           | 0.238                             | 0.494  |  |  |  |  |
| Cicada    | 628.3                             | 0.046                             | 1537                      | 1248           | 0.232                             | 0.478  |  |  |  |  |
| Tarantula | 749.9                             | 0.036                             | 1792                      | 1450           | 0.225                             | 0.459  |  |  |  |  |

Wind Speed 1m/sec, air temp. 10°C for winter night, 40°C for summer noon, intensity of solar radiation 1000 W/m² for summer noon

## DOMINION WIRE & CABLES LTD.

## QUALITY CABLE MANUFACTURES, DISTRIBUTORS AND EXPORTERS LOT 3, KINGS ROAD, YALALEVU, BA. P.O. BOX 1562, BA, FIJI.

PHONE: (679)6675244 FAX: (679)6670023,

E-Mail: <a href="mailto:sales@dominioncables.com">sales@dominioncables.com</a> web: www.dominioncables.com

Dominion Cables is a leader in the Cable Industry. The services of sales and technical staff are always available to assist with any enquiry.

The Dominion Cables policy is one of continual improvement. Details as published may be subject to change.

This brochure is distributed with the understanding that the authors and editors are not responsible for the results of any action taken on the basis of information in this work, or any errors or omissions. Further, Dominion Cables is not engaged in rendering professional services. Dominion Cables expressly disclaims all and any liability to any person in respect of anything and of the consequences of anything done or omitted to be done by any such person in reliance whether whole or partial of the whole or any part of the contents of this publication. All rights reserve