

Form 49  
[Rule 13.19]

CLERK OF THE COURT  
FILED

JUL 12 2013

JUDICIAL CENTRE  
OF CALGARY

Clerk's stamp:

COURT FILE NUMBER 1301-02432  
COURT COURT OF QUEEN'S BENCH OF ALBERTA,  
JUDICIAL CENTRE CALGARY

IN THE MATTER OF THE *COMPANIES' CREDITORS*  
*ARRANGEMENT ACT*, R.S.C. 1985, c. C-36, AS  
AMENDED

AND IN THE MATTER OF THE *ALBERTA BUSINESS*  
*CORPORATION ACT*, R.S.C. 2000, C. B-9, AS  
AMENDED

AND IN THE MATTER OF RS TECHNOLOGIES INC.

DOCUMENT **AFFIDAVIT**

ADDRESS FOR SERVICE AND CONTACT INFORMATION OF PARTY FILING THIS DOCUMENT BLAKE, CASSELS & GRAYDON LLP  
3500, 855 – 2<sup>nd</sup> Street S.W.  
Calgary, AB T2P 4J8  
Attn: Kelly Bourassa  
Telephone/Facsimile: 403-260-9697/403-260-9700  
Email: kelly.bourassa @blakes.com  
File Ref.: 89300/1

**AFFIDAVIT OF CAROL BENISH**

**Sworn on July 12, 2013**

I, CAROL BENISH, of the City of Calgary, in the Province of Alberta, SWEAR AND SAY THAT:

1. I am employed by Blake, Cassels & Graydon LLP and as such have personal knowledge of the matters deposed to in this Affidavit.

2. Marked and attached hereto as Exhibit "A" is a letter to Kelly Bourassa of Blake, Cassels & Graydon LLP from Kimberley Robertson of Lawson Lundell LLP dated July 9, 2013.

SWORN BEFORE ME at the City of  
Calgary, in the Province of Alberta,  
this 12<sup>th</sup> day of July, 2013.

)  
)  
)  
)  
)  
)

\_\_\_\_\_  
A Commissioner for Oaths in and for  
the Province of Alberta

MATTHEW J. SIMPSON  
*Barrister and Solicitor*

*Carol Benish*  
\_\_\_\_\_  
CAROL BENISH



THIS IS EXHIBIT " A "  
 referred to in the Affidavit of  
Carol Benish  
 Sworn before me this 12  
 day of July A.D. 2013

[Signature]  
 A COMMISSIONER FOR OATHS IN AND  
 FOR THE PROVINCE OF ALBERTA

Kimberley Robertson  
 T: 604.631.9142  
 F: 604.641.4428

July 9, 2013

VIA EMAIL (kelly.bourassa@blakes.com)

[Signature]  
 MATTHEW J. SIMPSON  
 Barrister and Solicitor

Robertson@lawsonlundell.com

Blakes  
 855 - 2nd Street S.W.  
 Suite 3500 Bankers Hall East Tower  
 Calgary AB T2P 4J8

Attention: Kelly Bourassa

Dear Sirs and Mesdames:

**Re: In The Matter of the CCAA of RS Technologies Inc. (the "Company")**

We advise that Armor Utilities Structures Pty Limited ("Armor") has re-retained our firm to act on their behalf with respect to the application to have the disclaimer of their distribution agreement set aside.

As to the outstanding matters:

1. **Process Order** – We confirm that we have no intention of cross-examining Mr. Fecht on his affidavit. We confirm our intention to provide our client's brief of law to you by tomorrow.
2. **Outstanding Discovery Requests** - The process order is silent as to the timing of responding to the outstanding requests from discovery. Accordingly, we take this opportunity to now provide those answers:

Undertaking 1 - The management fee charged between the 2 companies is a fee determined by our external accountant.

Undertaking 2. - The lease commenced for the premises at 448 The Boulevard Kirrawee on 1st June 2009 which is where Armor Australia P/L & Armor Utility Structures P/L are based.

Undertaking 3 - Essential Energy(formerly Country Energy) have purchased 12 poles since the ENA tender. After receiving the poles from the ENA tender in 2008, It has taken Essential several years to install the remaining poles.

The 12 poles purchased in 2012 are part of a new trial being conducted by Essential with regards to the suitability of RS poles for use in backyards. The installation sites are located not far from

1600 Cathedral Place  
 925 West Georgia Street  
 Vancouver, British Columbia  
 Canada V6C 3L2  
 Telephone 604 685 3456  
 Facsimile 604 669 1620

www.lawsonlundell.com

Vancouver  
 Calgary  
 Yellowknife

the Australian Capital Territory (ACT) which is where Actew poles are installed. The distribution poles leading into the properties and in the backyards were initially installed similarly the ActewAGL poles (ie. in residential backyards) and there is now a serious problem with accessing and changing the condemned poles.

The Essential Energy 2012 trial of the RS poles was conducted with the use of a the ActewAGL lifting beam (on loan) that is used in the installation of RS poles. The trial was a success and Essential Energy have advised that there will be a significant increase in future orders of Module 2&3 poles similar to those that ActewAGL purchase.

Undertaking 4 - The following companies were advised of the results of the RS Fire Test, some of these companies' representatives that Armor deals with were advised face-to-face with the provision of hard copy reports, however others were advised via email.

These companies include:

- Ausgrid (formerly Energy Australia),
- Essential Energy (formerly Country Energy),
- SPAusnet,
- Western Power,
- ActewAGL,
- Energex,
- Ergon,
- Powercor,
- Aurora,
- Integral Energy,
- Horizon Power,
- Power & Water,
- Transgrid.

Undertaking 5 - Stock on hand at June 30th 2012 included

- 1 x Module 1,
- 1 x Module 2,
- 4 x Module 3,
- 1 x Module 4,

Various hardware components including

Base plates  
Blind-nuts  
Top-caps  
Pole steps  
Hole-plugs  
J-bolts

Undertaking 6 - In the past 2 years we have sold poles with accompanying hardware to:

ActewAGL  
Essential Energy(Country Energy)  
Ausgrid(Energy Australia),  
Vertical Innovations

Hardware components for the RS poles have been sold to:

ActewAGL  
Essential Energy(Country Energy)  
Ausgrid(Energy Australia)  
Ergon  
Energex

Undertaking 7 - For the ActewAGL tender, there appears to be 3 tests/standards that RS did not conform to:

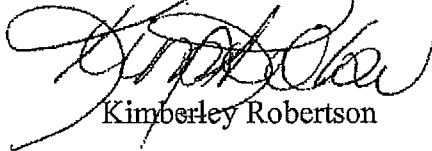
1. Non Conformance to - Surface Burning Tests: ASTM E84 & Building Materials Fire Tests BS476-7:1997. This standard was specified in the tender, however the RS poles had not been tested to.
2. High Voltage tests AS 1931.1-1996 & Resistivity Tests IEC 60093 Ed 2.0. This standard also specified in the tender and RS poles had not been tested to.
3. A Destructive bend test of a combined module 2&3 (currently supplied configuration). This test information also specified as a tender requirement.
3. **Response Affidavits** - The process order is also silent as to the timing of delivery of any response affidavits. We enclose an affidavit sworn by Doug Oldfield in response to Mr. Fecht's affidavit, specifically in respect of the hearsay allegations made by him and/or those matters to which he would have no knowledge but has raised in his affidavit.
4. **Application for Valuation of Claim** - We note that you have scheduled an application to have the Armor claim valued, to be scheduled for this Friday. That application is premature given that the disclaimer issue will

not have yet been resolved. We trust that you will adjourn the matter until the disclaimer application has been determined.

We look forward to discussing this matter and moving it forward towards a resolution.

Yours very truly,

LAWSON LUNDELL LLP



Kimberley Robertson

KAR/mbd

cc. McCarthy Tétrault – Attn: Sean Collins, Counsel for the Monitor  
([scollins@mccarthy.ca](mailto:scollins@mccarthy.ca))

Clerk's Stamp

COURT FILE NUMBER 1301-02432  
COURT COURT OF QUEEN'S BENCH OF ALBERTA  
JUDICIAL CENTRE CALGARY

IN THE MATTER OF THE COMPANIES  
CREDITORS ARRANGEMENT ACT, R.S.C.  
1985, C. C-36, AS AMENDED

AND IN THE MATTER OF THE ALBERTA  
BUSINESS CORPORATIONS ACT, R.S.A. 2000,  
c. B-9 AS AMENDED

APPLICANT RS TECHNOLOGIES INC.

DOCUMENT AFFIDAVIT

ADDRESS FOR SERVICE AND CONTACT  
INFORMATION OF PARTY FILING THIS  
DOCUMENT  
LAWSON LUNDELL LLP  
Barristers & Solicitors  
3700, 205 - 5th Avenue S.W.  
Calgary, Alberta T2P 2V7  
Attention: Kimberley A. Robertson  
Telephone: (403) 269-6900  
Fax: (403) 269-9494

AFFIDAVIT OF DOUG OLDFIELD

Sworn on July \_\_\_\_, 2013

I, DOUGLAS OLDFIELD, of 192 Crown Street, Darlinghurst, in the City of Sydney, New South Wales, Australia, MAKE OATH AND SAY THAT:

I, I am the Australasian Sales Manager of Armor Utility Structures Pty Limited ("Armor"), and as such have personal knowledge of the facts hereinafter deposed to, save and

except where such facts are stated to be based on information and belief, in which case I verily believe the same to be true.

2. I am authorized by Armor to make this affidavit in response to the Affidavit of Galen Fecht, sworn June 13, 2013. For the ease of reference, I will refer to the paragraphs of Mr. Fecht's affidavit to which I am responding.

3. In specific response to paragraph 8, I note that Mr. Fecht has not provided any admissible evidence to support the conclusions and opinions contained therein in respect of ActewAGL ("Actew"). In particular, the conclusion that Armor has not actively marketed the RS Poles, has applied extremely high markup "given that" Actew fails to provide local inventory, and that Armor has failed to provide adequate customer service is not true. These conclusions ignore the relationship and history between Armor and Actew. In particular, the following is of note:

- (a) Throughout 2012 and 2013, I have personally actively assisted Wayne Cleland (Senior Standards Manager) and Bob Spence (the field Crew Manager) from Actew in developing work standards methods for pole replacement, involving participation with field crew training at the Actew facility.
- (b) As to the stock levels, the level of Actew's consumption requires container load purchases, and until the Actew Request For Tender was released in 2013, stock storage for Actew at our facility has not been required to service Actew's needs at all, nor has it been requested by Actew. This has not been required as the requirement of Actew for the Module 2,3 RS poles is at a level of approx average of 60 poles per month and a full 40'HC container holds 66 poles. I have been present (or have had a representative present) at every Actew container unloading after arrival by sea or air before delivery to Actew, and to the best of my information no issue has ever been raised to Armor directly as to a need to maintain local inventory.
- (c) In 2012, Actew had several quality concerns ("QC") which were raised by Wayne Cleland, the Senior Standards Manager. However, these were addressed. In particular, during this time I travelled a number of times to meet with Actew to



take part in their internal QC inspections. These QC issues have been resolved and, based on the feedback I received from Wayne and his employees, they are very satisfied with the product.

- (d) Until RS poles sought to disclaim our distribution contract, I had never been told by anyone on behalf of Actew, nor had anyone with Armor told me that they had been advised by anyone at Actew, that Actew had any concern that Armor was not supplying adequate customer support. In fact, if there is any concern with customer service, based on what has been said to me by Wayne Cleland and Derek Pether of Actew, it is that RS Poles has shown no urgency in responding to Actew's technical & quality queries. These were queries that the Actew Standards department has insisted on manufacturer's clarification. It is of my understanding that this was required for Quality Assurance (QA) and insurance purposes. This is something that RS Poles is required to provide directly and was outside of Armor's ability to provide.

4. In specific response to paragraphs 11 and 14 and the conclusion that Armor has failed to adequately market the poles or establish a sufficient presence in the Territory, Armor has established fully the market that has been available to date.

5. Attached as Exhibit "A" is a true copy of an email sent from Mr. Fecht to me on April 16, 2010 referring to an article from 2007, which references the ENA trial that the Australian utilities participated in. The majority of the poles that were ultimately used in the trial were delivered in 2008 and most participating companies took several years to install the majority of the poles purchased. The article states "In-service trials could take some years, with the poles not expected to be fully endorsed for service in Australian locations for at least four to five years."

6. The utility industry is characterized by government and ex-government departments, with a product that is generally long lasting, and it is unreasonable to expect a fast adoption of a new product. I have been advised by Galen Fecht previously that this factor has been a major obstacle for RS in all arrears (not just the Territory serviced by Armor), and has greatly contributed to the situation that RS find their company in. However, this does not arise from any failings of Armor.

7. To the extent there is a market and/or customer base other than Aetew, we have always been open to developing a relationship with that customer base.

8. In specific response to paragraph 13, the direct enquiries that were made to RS, and forwarded to Armor, as being a customer source within the Territory, were in fact followed up on by me. That they did not result in contracts was not as a result of a lack of contact by Armor. In particular:

- (a) Kirk Electrical - Lyndon Kirk - I engaged in discussions with Lyndon Kirk, during which he advised me that he is a contractor specializing in the installation of 6.5m property lead in poles and was interested in exploring the suitability of RS poles for this application. Previously, he had been purchasing steel poles for approximately AUD\$120. I quoted him on certain quantities of the RS Module 1&2 equivalent. Our landed price to deliver them to Lyndon in North Queensland was in excess of AUD\$1400, more than 11 times his steel equivalent buy price. Lyndon determined that the RS pole was, therefore, not an option. Even without our mark-up, it was clear during our conversation that the RS Poles were too expensive for them.
- (b) Julian Challingsworth & Brad Miller from the Linus Group - The Linus group are consultants to various industries including electrical. While I attempted to contact both men several times, and left several messages to phone me as I was returning their inquiry to RS Poles, I received no return calls.
- (c) Transgrid - I would like to clarify that Transgrid did not make an inquiry that was forwarded through RS Poles. Instead, Mr. Feeht forwarded to me information about the company that he had found on the internet, specifically regarding Transmission projects that Transgrid was involved in. Armor forwarded information to Transgrid regarding the RS product to solicit interest. However, Transgrid has advised us that they are reluctant to use the RS poles as they did not have the required Bush Fire resistance and almost all of their projects are in Bush Fire zoned areas. They have instead opted for steel and concrete alternative.

9. Armor has adequately directly marketed the RS product to all major potential Utilities in the Australian market. Since I took on my position at Armor, RS have not forwarded or advised me of any direct enquiry from a major utility or a member of the Energy Network of Australia other than the recent interaction with ActewAGL.

10. In specific response to paragraph 15 and Mr. Fecht's statement that Actew is the only significant customer that Armor has developed in the Territory is misleading. We have recently been involved in significant marketing efforts in respect of Ausgrid & Essential Energy, as follows:

- (a) Ausgrid (Australia's no 1 utility). There has been significant work undertaken with Ausgrid, through their Managers Trevor Moss & John Egger. Ausgrid has invested in a lifting beam as utilised by Actew. Armor had involvement in organizing this machinery, which came at a cost of approx AUD\$36,000, a significant commitment by Ausgrid. I have quoted on (see attached) and been given a verbal undertaking that Ausgrid will be placing an order in the vicinity of AUD\$100K for a mixed container of Module 1&2, Module 2&3, and Module 1,2,3 combinations in 2013. A true copy of the email quote to Ausgrid is attached as Exhibit "B"
- (b) Essential Energy - The 12 poles purchased in 2012 are part of a new trial being conducted by Essential, (headed up by Bradley Pierce, the Design Project Manager) with regards to the suitability of RS poles for use in backyards. The installation sites are located not far from the Australian Capital Territory (ACT) which is where Actew poles are installed. The residential electricity distribution has a similar design with the poles installed in the backyards and there is now a serious problem with accessing and changing the condemned poles. The Essential Energy 2012 trial of the RS poles was conducted with the use of a the ActewAGL lifting beam. The trial was a success and Bradley Pierce has advised that

there will be a significant increase in future orders of Module 2&3 poles similar to those that ActewAGL purchase.

- (c) The above mentioned and the other members of the ENA are still officially in the assessment stage of the 2008 ENA trial, as referenced in the article quoted in Mr. Pecht's email attached as Exhibit "A".

11. In specific response to paragraph 17 and the claim that Actew would seek an alternative to the RS Poles unless RS did not submit a direct bid is contrary to what Wayne Cleland of Actew has previously advised me. In particular, in a face-to-face meeting between myself and Mr. Cleland, Mr. Cleland advised me that Armor would be receiving a supply agreement from Actew for the supply of backyard poles and that Actew was aiming to commit all of its major suppliers to a supply agreement.

12. Further, Actew's ability to appoint an alternative supplier is, in my opinion based upon my knowledge of their supply needs, having supplied to them for some time, very unlikely. Wayne Cleland and Bob Spence from Actew have designed their own "Assembly and Installation Guide" for their installation crews, which is based solely on the RS product. A true copy of the Assembly and Installation Guide is attached as Exhibit "C".

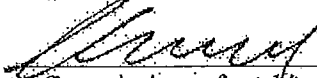
13. During my time spent with Bob Spence of Actew, and the field crews doing installation, I have always received the feedback that the RS pole is the best. In addition, I was advised that while Actew had looked for other alternatives, as it is in Actew's commercial interest to have 2 suppliers to guarantee continuous supply, the belief is that the RS poles perform the best for the Actew application. From feedback I have received from Bob Spence and an Actew member of the Standards department, Actew has no viable no alternative to the RS Poles. Accordingly, it is my belief that there is no reasonable probability that RS will lose the the Actew business.

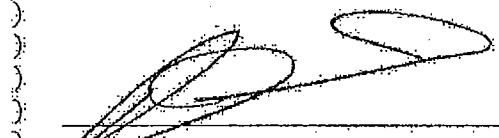
14. Although there is no direct or sworn evidence from Actew that the RS Pole supply agreement is in jeopardy in any way, any such assertion must be viewed under the lens that Actew would benefit from the disclaimer of Armor's distribution agreement, as it could then negotiate a better deal itself by "cutting out the middle man".

15. Further, I can confirm that Armor has continued to move forward with the Actew Tender process. Cath Collins, the Actew Contract Specialist, has made contact on several occasions since the tender submission. The communication has been with regards to the tender assessment progress with particular interest in how Armor has progressed with our Audit for ISO 9001:2008 accreditation, which is a prerequisite for supply with regards to the Actew pole tender. Attached as Exhibit "D" is a true copy of an email exchange with Ms. Collins in this regard. Armor's audit was successful on the 19<sup>th</sup> June audit and accreditation was received on 28<sup>th</sup> June, 2013...

16. I make this affidavit in response to the Affidavit of Galen Fecht sworn June 13, 2013, and to advise the court as to those matters outside the knowledge of Mr. Fecht, and to address the assumptions and conclusions erroneously made by him in his affidavit as a result.

SWORN BEFORE ME at the City of )  
London, United Kingdom, this 9<sup>th</sup> day of )  
July, 2013. )

  
\_\_\_\_\_  
A Commissioner for taking Affidavits or )  
Notary Public within The United Kingdom, )  
C.L. HORSWELL, SOLICITOR )

  
\_\_\_\_\_  
)

ALICE HEDLEYS,  
Solicitor,  
26 Old Brompton Road,  
South Kensington,  
London SW7 3DL  
020 7584 6733

THIS IS EXHIBIT "A" TO THE AFFIDAVIT OF  
DOUGLAS OLDFIELD MADE BEFORE ME this  
9<sup>th</sup> day of JULY, 2013

 A. L. HOLMES, *322 CTR*  
A Notary Public or Commissioner for Taking  
Affidavits for The United Kingdom

VOLKS HEDLEYS,  
Solicitors,  
26 Old Brompton **Road**,  
South Kensington,  
London SW7 3DL  
Telephone: 020 7584 6733

---

**From:** Galen Fecht [Galen.Fecht@groupsci.com]  
**Sent:** 16 April 2010 15:11  
**To:** Doug Oldfield  
**Subject:** Article

Hi Doug,

I happened to come across this article from 2007:

## **Fibre Composite Power Pole Trial**

Electricity distributors Ergon Energy and Energex have put composite power poles on trial in various parts of Queensland.

Minister for Mines and Energy Geoff Wilson said the trial was part of a consortium bid to explore the suitability of fibre composite power poles. "The State Government is encouraging a move away from hardwood timber poles taken from state forests," Mr Wilson said.

"Fibre composite power poles could ultimately lead to a more environmentally-friendly version of overhead electricity line supports. While fibre composite poles are expected to cost slightly more than hardwood poles, they could offer a number of benefits. For instance, pest and rot resistance, low inspection and maintenance costs, a longer service life and cheaper transport and construction costs due to its lighter weight," Mr Wilson said.

In-service trials could take some years, with the poles not expected to be fully endorsed for service in Australian locations for at least four to five years.

Minister Wilson said an international tender for a trial batch of 140 fibre composite poles was launched last year by the Energy Networks Association with the support of the Queensland Department of State Development and Trade.

The fibre composite poles will be tested at various sites across the state as well as trial sites in Victoria and New South Wales. They'll be tested for resistance to extremes of temperature, humidity, lightning and attacks from termites and fungus. The poles will be subjected to high voltage laboratory tests as well as strength and resilience tests to ensure they meet Australian Standards.

Publication Date: 15/04/2007


Here is the website: <http://www.netcomposites.com/news.asp?4308>

**Galen Fecht**  
Director, Business Development

RS Technologies (TSX: RS)  
400, 2421 - 37th Avenue NE  
Calgary, AB T2E 6Y7  
Toll-Free: +1 877 219-8002  
Main: +1 403-219-8000  
Cell: +1 416-560-7620  
Fax: +1 403-219-8001  
Email: [galen.fecht@groupsci.com](mailto:galen.fecht@groupsci.com)  
[www.RStandard.com](http://www.RStandard.com)



THIS IS EXHIBIT "B" TO THE AFFIDAVIT OF  
DOUGLAS OLDFIELD MADE BEFORE ME this  
9th day of JULY, 2013.

  
A Notary Public of Commissioner for Taking  
Affidavits for The United Kingdom

WOLKE HEDLEYS,  
Solicitors,  
26 Old Brompton Road,  
South Kensington,  
London SW7 3DL  
Telephone: 020 7584 6733



---

**From:** Doug Oldfield [doug@armoraustralia.com]  
**Sent:** 08 March 2013 05:09  
**To:** 'Trevor Moss'  
**Subject:** FW: Ausgrid Proforma  
**Attachments:** Pro Forma Invoice 96.pdf, Ausgrid Quote 95.pdf

Hi Trevor

Please find attached pro forma invoice for the toggle bolts attached and quote for the mixed pole container.

There is currently about an 8 week lead time for despatch from Canada for the poles and then approx 6 weeks from door to door on top of that.

Kind Regards,

*Doug Oldfield*



**Australasian Sales Manager**  
Armor Utility Structures Pty Ltd  
448 The Boulevard  
Kirrawee, NSW 2232

(ph) +61 2 9521 1901  
(mob) +61 (0) 414 905 288  
(fax) +61 2 9521 1941

# Quote



Quote #: 00000095  
Date: 8/03/2018  
A.B.N: 71 114 052 096  
Phone: 02 9521 1901  
Fax: 02 9521 1941  
Email: doug@armoraustralia.com

448 The Boulevard  
Kirrawee  
NSW 2232

Customer PO:

Bill To:  
Ausgrid  
Accounts Payable  
GPO Box 4009 Sydney 2001

Ship To:  
Ausgrid  
Address to be advised.

| Description  | Amount      | Code |
|--|-------------|------|
| 6 x Composite Pole 8m 5kN @ \$2333.00 per pole (excl. GST)                                       | \$13,998.00 | GST  |
| 24 x Composite Pole 9.7m 8kN @ \$2795.00 per pole (excl. GST)<br>(Drilled as per ActewAGL Spec.) | \$67,104.00 | GST  |
| 6 x Composite Pole 13.5m @ \$3385.00 per pole (excl. GST)<br>(Full size MQ103)                   | \$20,310.00 | GST  |

FIS Hornsby or Sydney Metropolitan.  
Terms: Net 14 days.

Customer ABN:

Freight: \$0.00 GST

GST: \$10,141.20

Total Inc GST: \$111,553.20

Amount Applied: \$0.00

Balance Due: \$111,553.20

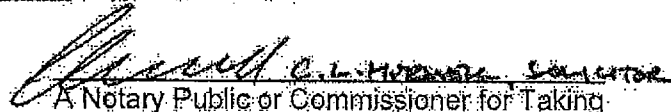
Please pay by cheque or EFT to:

Armor Australia Pty Ltd

ANZ: - BSB 012-262 Acc No: 188326585

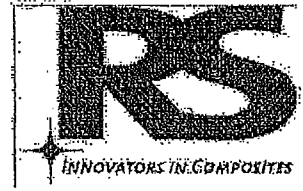
Please quote invoice number as your reference and email remittance to [accounts@armoraustralia.com](mailto:accounts@armoraustralia.com).

THIS IS EXHIBIT "C" TO THE AFFIDAVIT OF  
DOUGLAS OLDFIELD MADE BEFORE ME this  
9th day of JULY, 2013:

  
A Notary Public or Commissioner for Taking  
Affidavits for The United Kingdom.

YOLKS HEDLEYS,  
Solicitors,  
25 Old Brompton Road,  
South Kensington,  
London SW7 3DL  
Telephone: 020 7584 6733

**INFRASTRUCTURE FOR LIFE®**



**RS STANDARD®**  
*Composite Utility Poles*

---

## **Assembly & Installation Guide (Metric)**

**INFRASTRUCTURE FOR LIFE®**

INFRASTRUCTURE FOR LIFE®

# RS STANDARD®

Composite Utility Poles

RS Technologies

[www.RStandard.com](http://www.RStandard.com)

Email [info@grouprst.com](mailto:info@grouprst.com)  
Toll Free +1 877 219 8002  
Phone +1 403 219 8000  
Fax +1 403 219 8001

233 Mayland Place NE  
Calgary, AB T2E 7Z8



# INFRASTRUCTURE FOR LIFE®



## Assembly & Installation Guide

# Table of Contents

|   |    |
|---|----|
| Foreword  | 4  |
| 1.0 Module Information                                    | 5  |
| 2.0 Equipment and Safety                                  | 6  |
| 3.0 Pole & Module and Code Legend                         | 7  |
| 4.0 Receiving and Unloading                               |    |
| - 4.1 Receiving a trailer load of poles                   | 8  |
| 5.0 Un-Nest Pole Modules                                  |    |
| - 5.1 Remove shipping bolt                                | 8  |
| - 5.2 Un-nest modules and layout for assembly             | 9  |
| 6.0 Line-Up Modules for Assembly                          |    |
| - 6.1 Fit modules together for vertical installation      | 9  |
| - 6.2 Fit modules together for horizontal installation    | 10 |
| 7.0 Install Jacking Lugs                                  |    |
| - 7.1 Module standard drilling                            |    |
| - 7.2 Insert jacking lugs into pre-drilled holes          | 11 |
| - 7.3 Double wall jacking lugs                            | 11 |
| - 7.4 Install jacking lug safety device                   | 12 |
| 8.0 Assemble Modules                                      |    |
| - 8.1 Attach come-alongs to jacking lugs                  | 13 |
| - 8.2 Winch modules together                              | 13 |
| 9.0 Secure Joint  |    |
| - 9.1 Drill holes for the blind nut                       | 14 |
| - 9.2 Install blind nuts                                  | 14 |
| 10.0 Install Base Plate                                   |    |
| - 10.1 Insert J-bolts into pre-drilled base plate holes   | 16 |
| - 10.2 Attach base plate using J-bolts, washers, and nuts | 16 |
| 11.0 Install Top Cap                                      | 17 |
| 12.0 Set the Pole   | 18 |

Revised by Bob Spence 24 April 12 to be Approved Document V5 By RS

# INFRASTRUCTURE FOR LIFE®

## Foreword

---

### Disclaimer:

The following instructions are RS Technologies' recommendations regarding the receiving, assembly and installation of RStandard® modular composite utility poles and communication structures. These recommendations are intended to supplement ActewAGL standard drawing 391-740-11 and work instruction PSW #217.

Recommended procedures do not cover all possible variations in equipment design or provide answers to all specific installation and operating questions which may occur. As such please contact your local RS representative should you have any questions about procedures that are not covered in this guide.

### Standard Items Delivered With RStandard Poles:

1. Joint Hardware (eg blind nut, washers, bolts and hole plugs per joint)
2. One Base Plate (per pole)
3. Four J-Bolts Nuts and Washers (for base plate)
4. One Top Cap (per pole)
5. Four Self-Tapping Screws (for top cap)

### Additional Accessories Available From RS Upon Request:

1. RStandard Jacking Lugs (4 or more are required to assemble a pole) **REQUIRED**
2. Drill Bits. Composite Drill Quad Tip or appropriate with Pilot for slip joint holes in slots; regular carbide tipped bit for other holes on the pole **REQUIRED**
3. Pole Steps. Optional

# INFRASTRUCTURE FOR LIFE®

## 1.0 Module Information

| Metric Units | Module Label | Length (in) | Thickness (cm) | Mass (kg) | Tube Taper (mm/m) | Lap Length (m) | Tip Diameter (cm) | Base Diameter (cm) | Standard Base Plate Diameter (mm) | N-1 Base Plate Diameter (mm) |
|--------------|--------------|-------------|----------------|-----------|-------------------|----------------|-------------------|--------------------|-----------------------------------|------------------------------|
|              | HL           | 61.47       | 1.18           | 98        | 0.09              | 0.516          | 19.22             | 24.01              | 325.9                             | N/A                          |
| 1            | 4.615        | 1.18        | 69             | 0.27      | 0.516             | 20.53          | 24.01             | 325.9              | N/A                               |                              |
| 2            | 5.385        | 0.965       | 77             | 20.22     | 0.69              | 21.01          | 31.9              | 400.6              | 325.9                             |                              |
| 3            | 5.3          | 0.965       | 102            | 20.26     | 0.85              | 28.18          | 38.9              | 471.3              | 400.6                             |                              |
| 4            | 5.774        | 0.965       | 136            | 20.14     | 1.024             | 34.77          | 46.4              | 546                | 471.3                             |                              |
| 5            | 5.789        | 1.03        | 163            | 20.59     | 1.196             | 42.14          | 54.06             | 621.4              | 546                               |                              |
| 5/6          | 10.63        | 1.18        | 350            | 19.71     | 0                 | 42.13          | 68.08             | 709.7              | 621.4                             |                              |
| 6/7          | 10.65        | 1.06        | 308            | 20.52     | 1.384             | 49.1           | 70.91             | 790.1              | 709.7                             |                              |
| 8/9          | 10.095       | 1.165       | 543            | 20.17     | 1.964             | 65.59          | 87.36             | 940.5              | N/A                               |                              |
| 10/11        | 11.24        | 1.165       | 680            | 19.88     | 0                 | 81.19          | 103.53            | 1115.3             | N/A                               |                              |

<sup>1</sup> 5/6 Base OD = 850.0 mm, however N-1 Base plate (015) does work.

<sup>2</sup> 10/11 Base Plate is not circular but approximately 065.2 mm with rounded corners measuring 315.3 mm from center to corner.

| Imperial Units | Module Label | Length (ft) | Thickness (in) | Weight (lbs) | Tube Taper (in/ft) | Lap Length (ft) | Tip Diameter (in) | Base Diameter (in) | Standard Base Plate Diameter (in) | N-1 Base Plate Diameter (in) |
|----------------|--------------|-------------|----------------|--------------|--------------------|-----------------|-------------------|--------------------|-----------------------------------|------------------------------|
|                | HL           | 20.167      | 0.465          | 216.1        | 0.149              | 1.694           | 7.567             | 9.768              | 12.83                             | N/A                          |
| 1              | 15.141       | 0.465       | 152.1          | 0.111        | 1.694              | 8.083           | 9.768             | 12.83              | N/A                               |                              |
| 2              | 17.667       | 0.38        | 169.8          | 0.243        | 2.264              | 8.272           | 12.559            | 15.77              | 12.83                             |                              |
| 3              | 17.589       | 0.38        | 324.9          | 0.243        | 2.792              | 11.087          | 15.915            | 18.56              | 15.77                             |                              |
| 4              | 18.944       | 0.38        | 299.0          | 0.242        | 3.36               | 13.689          | 18.288            | 21.49              | 18.56                             |                              |
| 5              | 18.983       | 0.406       | 359.4          | 0.247        | 3.924              | 16.591          | 21.284            | 24.46              | 21.49                             |                              |
| 5/6            | 34.875       | 0.465       | 771.8          | 0.236        | 0                  | 16.587          | 24.895            | 27.94              | 24.46                             |                              |
| 6/7            | 34.875       | 0.425       | 889.6          | 0.246        | 5.197              | 19.331          | 28.912            | 31.1               | 27.94                             |                              |
| 8/9            | 35.743       | 0.459       | 1197.1         | 0.242        | 6.444              | 26.823          | 34.472            | 37.03              | N/A                               |                              |
| 10/11          | 38.972       | 0.459       | 1499.1         | 0.239        | 0                  | 31.965          | 40.78             | 43.01              | N/A                               |                              |

<sup>1</sup> 5/6 Base OD = 24.675", however N-1 base plate (1M5) does work.

<sup>2</sup> 10/11 Base Plate is not circular but approximately 33" x 38" with rounded corners measuring 43.91" from center to corner.

Note: Modules used for ACTEWAGL are modules 2 and 3.



## INFRASTRUCTURE FOR LIFE®

### 2.0 Equipment and Safety

#### 2.1 Installation Site Equipment Requirements For The RStandard® Pole.

1. Jacking Lugs
2. Jacking Lug Safety Restraints (chains)
3. Come-Alongs
4. Rubber Mallet (for slip joints tension release during module assembly)
5. Spanner/socket with capabilities from 14 mm (for J-Bolts) to 29 mm (for blind nuts)
6. #8 Hex Head socket with drill attachment (to install top cap screws)
7. Drill (gas, hydraulic or battery operated) with appropriate dust extraction or containment
8. 29 mm Composite drill quad tip bit or appropriate (other sizes as necessary if field drilling is required)
9. Chalk Line (for axial marking if field drilling is required)
10. Circular Saw with Diamond Blade (if modules will be field cut)
11. Permanent Marker (if field drilling or cutting)
12. Particle Mask and Safety Goggles (if field drilling or cutting)
13. Gloves
14. Earth Wire Clips and Self-Tapping Screws (if ground wire is run externally)
15. Fish Tape/Draw Wire/Draw Tape (if ground wire is run internally)
16. 30.48 m Tape Measure
17. Pole Cant

#### 2.2 Safety Notes

##### 2.2.1

Refer to the MSDS and consult your safety coordinator for information on Personal Protective Equipment required for this task. Always follow manufacturer's instructions when operating the drills and come-alongs.

##### 2.2.2

Always wear gloves when handling the modules.

##### 2.2.3

Always wear a particle mask when cutting or drilling fiberglass. All cutting and drilling equipment must be fitted with appropriate dust extraction or containment accessories to ensure all dust is collected and removed safely from site.

##### 2.2.4

Always wear safety glasses with side shields when cutting or drilling fiberglass.

##### 2.2.5

Always install safety chain when using jacking lugs.

# INFRASTRUCTURE FOR LIFE®

## 3.0 RStandard® Pole & Module Code Legend

The following pole data uses the RStandard® pole codes. See Figure 1a/Figure 1b for an understanding of pole and module code components.

From Figure 1a the sample code denotes a 12 m pole using modules 2, 3 and 4 with the top module cut to achieve the 12 m length.

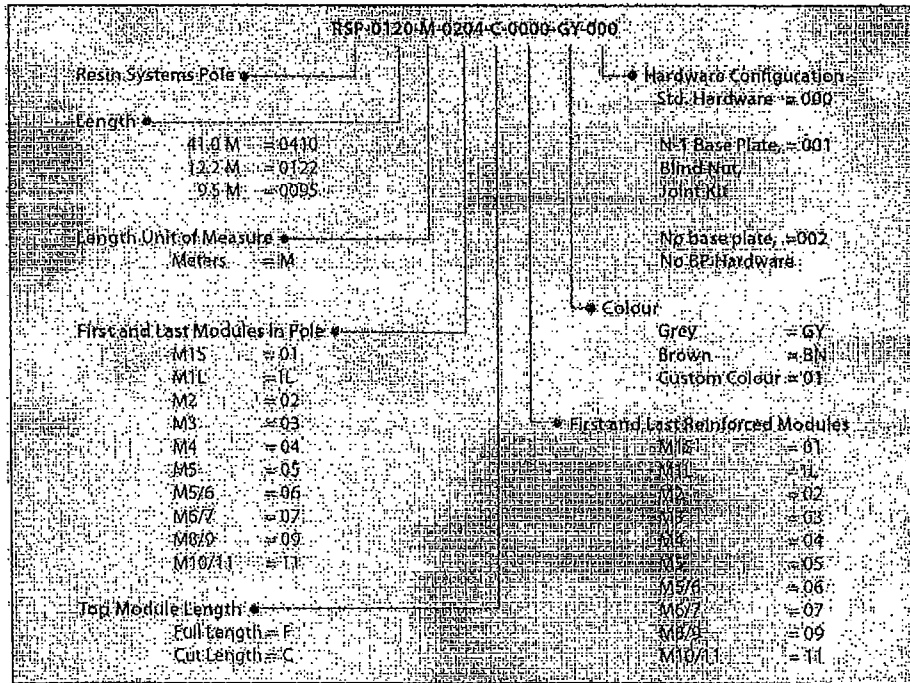


Figure 1a: Pole Code Legend

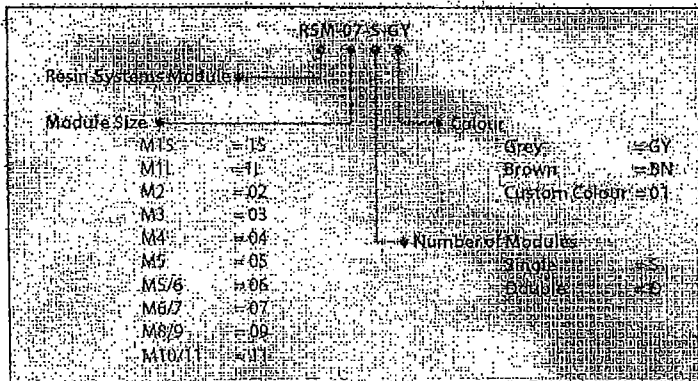


Figure 1b: Module Code Legend

# INFRASTRUCTURE FOR LIFE®

## 4.0 Receiving and Unloading

---

### 4.1 Receiving a trailer load of poles

RStandard® poles are shipped in nested bundles. Depending on the size of the pole, these bundles will be approximately 5.79 m or 11.28 m in length (See Figure 2). Nested RStandard poles can be unloaded using a forklift or boom truck (See Figure 3).

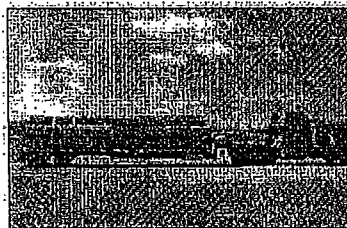


Figure 2: Typical flatbed trailer of RStandard modular poles.

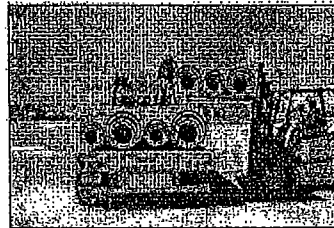
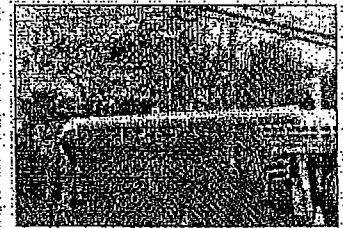


Figure 3: Unloading poles.



Nesting enables cost effective shipping of poles through the use of containers for overseas travel and reduced space on road transport.

## 5.0 Un-Nest Pole Modules

---

### 5.1 Remove shipping bolt

RStandard nested bundles are secured with a shipping bolt. To un-nest RStandard modules, this bolt must be removed with a socket or a spanner (See Figure 4). The shipping bolt is located at the base (or larger) end of the bundle and passes through all the modules in the bundle. Ensure that the shipping ensure that the shipping bolt is on the bottom of the nested module set to reduce module movement after the shipping bolt is removed and to avoid possible injury.

*Note: Other Blind Nut/Bolt assemblies may be installed along the length of the module(s) or bundle. These bolts are used to secure double modules used in reinforced poles and SHOULD NOT be removed.*

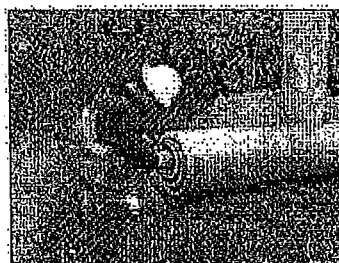


Figure 4: Shipping bolt being removed.



Figure 5: Modules being un-nested and laid out for assembly.

## INFRASTRUCTURE FOR LIFE®

### 5.2 Un-nest modules and lay out for assembly

After the shipping bolt is removed, un-nest the modules starting with the innermost (smallest) module first and layout for assembly (See Figure 5). For smaller modules used by ActewAGL this can usually be accomplished by-hand with two to four crew members. For larger modules, handling with a boom truck is recommended to make moving faster and safer.

RS poles bases must be installed in accordance with ActewAGL Drawing 390-006 and this manufacturer's installation instruction. Ensure section 10 Install Base Plate is completed before base is installed.

## 6.0 Line-Up Modules For Assembly

### 6.1 Fit modules together for vertical installation.

RStandard® poles are designed to be assembled horizontally or vertically. For vertical assembly, the base module should be set and plumbed first as described in the 5.2 above. The subsequent module can then be lifted into place as a pre-framed single unit by the purpose designed ActewAGL carbon fibre lifting beam. This activity will be completed by following ActewAGL procedure P9W 217. The two sections alignment marks need not be used in the case of vertical installation however it is important that the jacking lugs and come alongs are oriented axially with the pole and have minimal twisting around the pole during assembly as this may lead to module rotation during assembly. After the modules are jacked together, a new securing hole must be drilled through base end of the blind nut securing slot in the top section into the tip of the base module of the pole. See 9.1 for drilling details and ActewAGL Dwg 391-740-11. Drilling details for 9.7m composite fibre pole;



#### IMPORTANT NOTES:

- When the pole is assembled vertically, the modules are required to be "jacked together" using come-alongs, chains, RStandard jacking lugs and jacking lug safety straps.
- Once the top section is in place then the pole can be climbed only to a height to access the jacking holes for installation of the jacking lugs.

## **INFRASTRUCTURE FOR LIFE®**

See also      Section 10 for installation of base plate  
                 Section 11 for installation of pole cap and  
                 Section 12 for setting the pole.

## INFRASTRUCTURE FOR LIFE®

### Hardware installation

Maximum recommended torque to be applied to king and eye belts through the pole is 67Nm. Without the use of a torque wrench, the nut should be tightened snugly (until the spring washer is flat, then one additional full turn of the nut should be applied).

### 6.2 Fit modules together for horizontal installation

For horizontal assembly please note that once the modules are un-nested and laid out in sequence for assembly, it is recommended that the modules be set on "blocking" to keep the modules off the ground and debris out of the slip joints. This will make it easier and quicker to assemble the modules. Two blocks per module is recommended. Remove any debris from the slip joint region, especially inside the butt end of the smaller (upper) module to be assembled where the tip of the larger (lower) module will be inserted (see Figure 6).

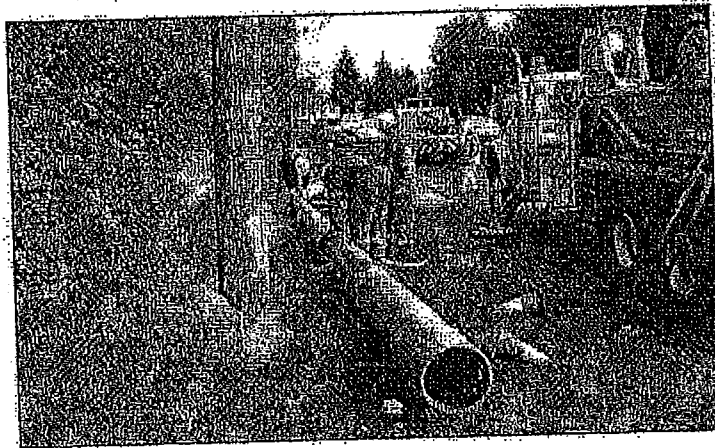


Figure 6: Modules being lined-up on blocks for assembly.

Once the modules are up on blocks, starting with the biggest modules, slide the base of the smaller module over the tip of the larger module by hand using the alignment marks as a guide. Using the alignment marks ensures that the jacking lug holes are kept in alignment. (See Figure 7 for pole marking details and Figure 8 for an example of modules being fitted together).

Note: Alignment marks will generally appear as text with data including module weight and serial number. Rarely will the alignment marks appear as a single solid line.

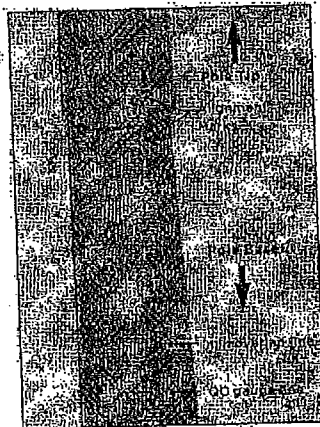


Figure 7: Pole marking details.



Figure 8: Modules being fitted together by hand in preparation for assembly.

## INFRASTRUCTURE FOR LIFE®

### 7.0 Install Jacking Lugs

**Note:** Once the top section is in place (at least 500mm overlap) then the pole can be climbed only to a height to access the jacking holes for installation of the jacking lugs.

#### 7.1 Module Standard Drilling

Every standard module is manufactured with eight pre-drilled locations. There are two (2) slots and two (2) holes at the base of every module. The two (2) slots are used for blind nut connections when the module is the smaller (upper) module in a slip joint and is not the base module in a pole. Both the two (2) slots and two holes (2) in the module base are used for four (4) 5-bolts to secure the base plate if the module is the bottom module in a pole combination. Most modules are also equipped with four (4) jacking lug hole locations with two (2) jacking lug holes located near the module tip and two (2) jacking lug holes located near the module base. These holes are utilized during the pole assembly process. The exceptions to this are modules 1 and 1 Long that only have two (2) jacking lug holes located near the base of the module, because these modules will only ever be at the top of combination, and modules 5/6 and 10/11 that only have two (2) jacking lug holes located near the tip of the module, because these modules will only ever be at the bottom of a combination.

#### 7.2 Insert jacking lugs into pre-drilled holes

Insert four jacking lugs into the pre-drilled jacking lug holes. Two jacking lug holes are located at 180 degrees to each other at the same height on opposite sides of the pole near the base of the smaller module and four jacking lug holes are located at 90 degrees to each other near the top of the larger base module (See Figure 9). Ensure that the lugs are fully inserted and flush with the pole wall to prevent damage to the pole wall by jacking lug. See also ActewAGL Dwg 391-740-11. Drilling details for 9.7m composite fibre pole.

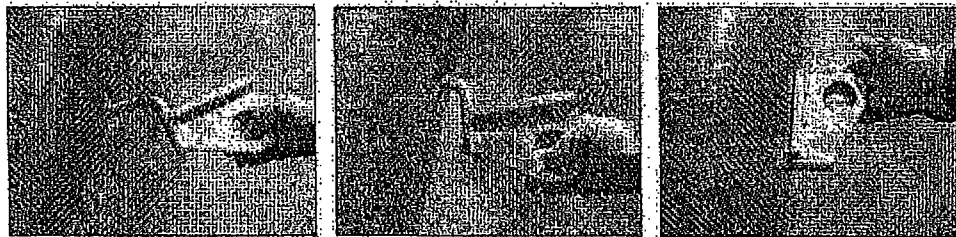


Figure 9. Jacking lug being inserted into pre-drilled jacking lug hole.

#### 7.3 Double wall vs. Single wall jacking lugs

When assembling two standard single wall (SW) modules, four single wall jacking lugs are required.

ActewAGL only purchase single wall modules for back yard pole installations.

This section is for information only.

SW jacking lugs are stamped with the following:

H-JL-S

DD/MM/YYYY

MADE IN CANADA

## INFRASTRUCTURE FOR LIFE®

RStandard® modules are also available in a double wall (DW) configuration where two of the same module have been assembled at the factory and secured with blind nut/bolt assemblies. It is important not to remove these bolt assemblies in the field. Additionally, these DW modules will require additional blind nut/bolt assemblies installed in pre-drilled locations along their length in the field after the entire pole has been assembled. Double wall modules may have a short section of the inner module protruding from the outer module at the base or be trimmed flush with the base of the outer module. Care should be taken in identifying these modules prior to pole assembly.

For assembling two DW modules, four DW jacking lugs are required.

For assembling one SW and one DW module, two SW and two DW jacking lugs are required.

Note: The SW and DW jacking lugs should be used only in their respective modules. It is critical to use the correct type of jacking lugs for SW and DW modules as improper use could result in damage to the modules.

DW jacking lugs are stamped with the following:

H-JL-D DD/MM/YYYY

MADE IN CANADA

MAX LOAD: 3T DOUBLE WALL ONLY

Note: The H-JL-S and the H-JL-D were formerly stamped RSX-1 and RSX-1DW respectively and are all compatible with RStandard modules.

### 7.4 Install jacking lug safety device

Wrap the jacking lug chain around the module at each jacking lug location.

Ensure that the chain passes through the large hole in the jacking lug. Fasten

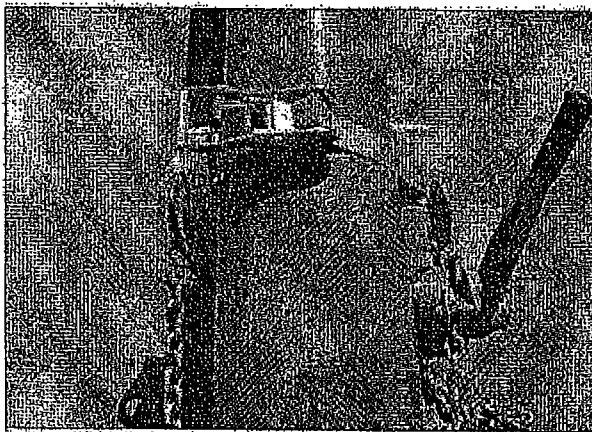
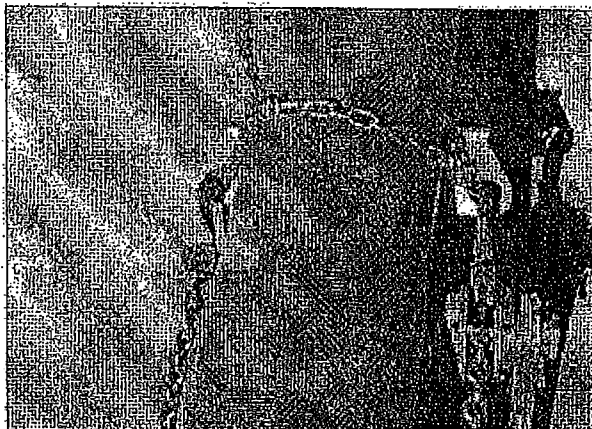


Figure 10: Jacking lugs with safety chain installed correctly.

the quick-link on the chain. The chain should be as snug as possible but not tight (some minor slack is expected in the chain. See Figure 11). The use of slings to secure the jacking lugs is no longer recommended by the manufacturer (Fig 10).

Note: The use of safety chains is mandatory when assembling RStandard® modules. Failure to use a safety chain could result in serious injury.





# INFRASTRUCTURE FOR LIFE®

## 8.0 Assemble Modules

---

### 8.1 Attach come-alongs to jacking lugs

ActewAGL poles have four jacking holes placed at 90° intervals around the top section of the base unit. This alleviates the need to align the two sections using the alignment markers on the poles however it is important that the jacking lugs and come-alongs are oriented axially with the pole and have minimal twisting around the pole during assembly as this may lead to module rotation during assembly.

For other pole types ensure that the modules being assembled are "lined-up" using the alignment marks.

Attach come-alongs to the jacking lugs on both sides of the pole (See Figure 11). It is recommended that 3 ton come-alongs are used to ensure that slip-joints are brought together properly.

### 8.2 Winch modules together

After the come-alongs are securely attached to the jacking lugs, winch modules together using equal force on both sides. During this process ensure that the longitudinal alignment between the modules is maintained (See Figure 12). Note: This alignment is not a requirement for ActewAGL backyard pole installations.

It is important that each slip joint is assembled securely. Continue winching **PAST** the dotted minimum overlap line until the joint is snug (See Figure 12 and 13). During the assembly process use a rubber mallet on the butt of the smaller (upper) module to relieve any built up stress in the slip joint resulting from uneven jacking pressure or module surface irregularities. Due to slip joint tolerance, the base of the top module may or may not pass the solid QC gauge line during pole assembly. Winching should continue until the slip joint is tight. If damage occurs to the jacking lug hole(s) during assembly, contact your local RS representative.

Note: The solid horizontal QC gauge line is used for manufacturing process quality assurance purposes and is not the maximum slip joint overlap (See Figure 12).

## INFRASTRUCTURE FOR LIFE<sup>®</sup>

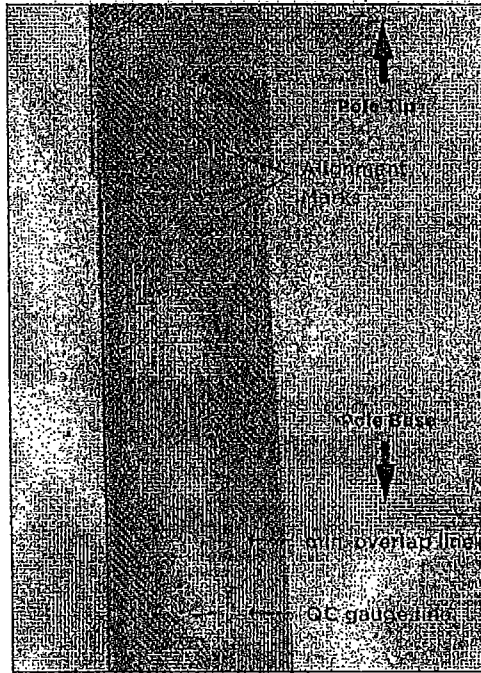
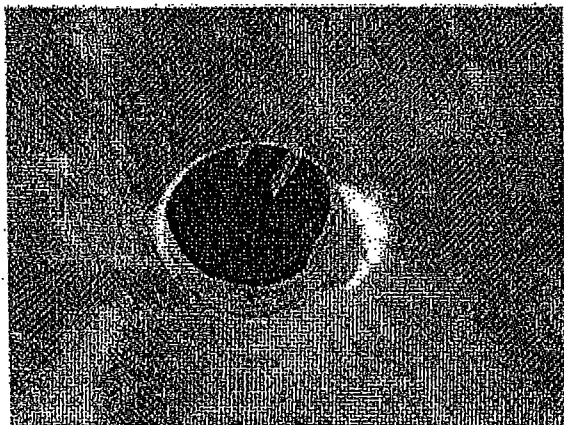


Figure 12: Alignment and minimum line markings.



Figure 13: Modules being winched together.

Note: When jacking the poles together using the come-alongs, it is important to closely watch the pole wall laminate at the four (4) jacking lug hole locations where the force from the come-alongs is transferred from the jacking lugs to the modules. Limited ovalization is acceptable (see the photo below) however if any tearing of the pole-wall laminate is observed, the jacking process should be stopped immediately.

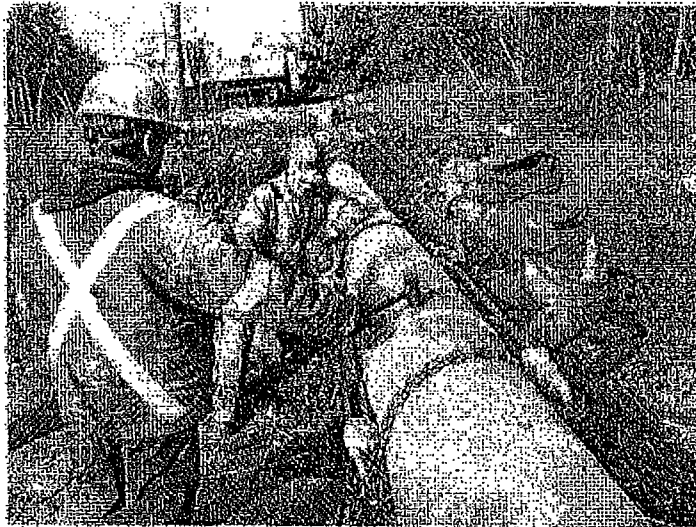


Jacking lug hole with acceptable ovalization.

Tip: Once the come-along chains are tensioned, a rubber mallet can be used throughout the jacking process to impact the base of the top (smaller) module in the slip joint to alleviate any uneven tension that has built up (see the photo below). If the pole is being assembled vertically, load the come-alongs with 1-2 handle strokes and then strike the base of the top (smaller) module in the slip joint with the rubber mallet. Continue this

## INFRASTRUCTURE FOR LIFE®

process until the slip joint is completely assembled. It can be common for the top smaller module to slip down 0.5-2.0cm when impacted with the rubber mallet.



Impacting the base of the top (smaller) during the assembly process.

## 9.0 Secure Joint

### 9.1 Drill holes for the blind nut

Once the joint is tight and fully seated, drill through the inner modules at the base end of the slot in the outer module with a 29 mm drill bit using the pre-cut slots as a guide. (See Figure 14). The drilled hole should be located as close to the base-end of the slot as possible. (See Figure 15).

Note: The slot is 22 mm wide to accommodate the bolt used in the blind nut. The hole is drilled oversized to allow the insertion of the blind nut.

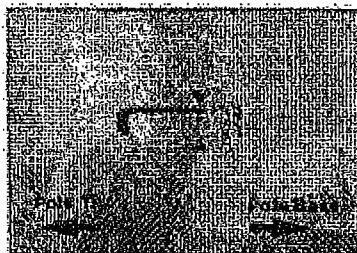
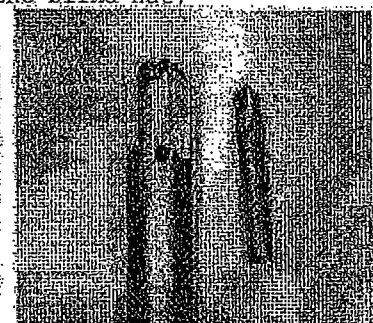


Figure 14: Drill holes for the blind nut.



Figure 15: Drill hole for the blind nut.



Drill bit tip.

### 9.2 Install blind nuts

Insert blind nut into drilled hole and pull back on the cable to center the nut in the drilled hole. Next, thread the bolt by hand, ensuring that the blind nut is kept in line vertically (parallel) with the pole center line. (See Figure 16). Pulling the blind nut cable to the side of the pole will automatically align the blind nut vertically. If the blind nut is horizontal, parallel to the ground, it may damage the pole wall. Once the bolt is threaded, tighten it with a socket or a crescent wrench. Repeat on the opposite side of the pole.

Revised by Bob Spence 24 April 12 to be Approved document V5 By RS

# INFRASTRUCTURE FOR LIFE®

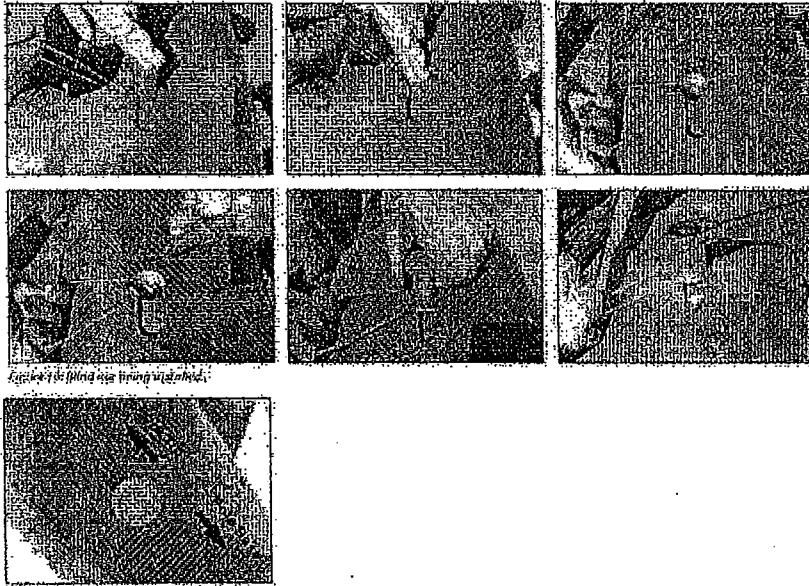


Figure 7: Blind nut installation.

For any remaining modules that need to be assembled, repeat the procedures for assembling the modules, inserting the jacking lugs, jacking the modules together and securing the joint.

Note: After completing the blind nut installation at the slip joints, trim the blind nut cable (See Figure 17).

NOTE: Once the bolts and blind nuts have been installed on the slip joint then the pole can be deemed serviceable.

## INFRASTRUCTURE FOR LIFE®

### 10.0 Install Base Plate

#### 10.1 Insert J-Bolts into pre-drilled base plate holes

Insert four J-Bolts from the outside of the module into pre-drilled base plate holes located at the bottom of the base module (See Figure 18).

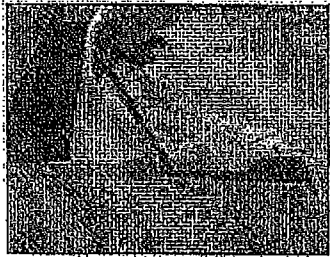


Figure 18: J-bolts being inserted in pre-drilled base plate slots of the base of the bottom module.

#### 10.2 Attach base plate using J-Bolts, washers and nuts

Place the appropriately sized base plate on the base of the pole and align the base plate with the J-Bolts installed. Thread J-Bolts through the slots on the base plate and then attach the washers and nuts by hand (See Figure 19). After all four J-Bolts are secured and the base plate is centered, tighten each nut with a socket or crescent wrench.

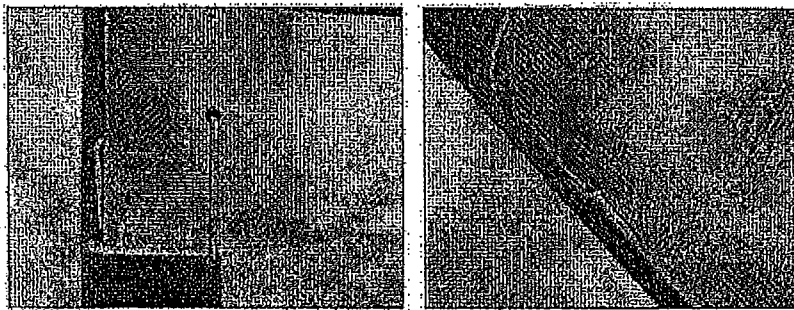


Figure 19: Align base plate slots with J-Bolts and install washers and nuts on each J-Bolt to hold base plate in place. Standard base plate on the left. 'N-1' base plate on the right.

Note: RStandard poles are shipped with the standard base plate. For installations where a smaller diameter base plate is required, the 'N-1' base plate option can be utilized and ordered accordingly. See page 3 of this Assembly and Installation Guide for base plate options and dimensional information.

## INFRASTRUCTURE FOR LIFE®

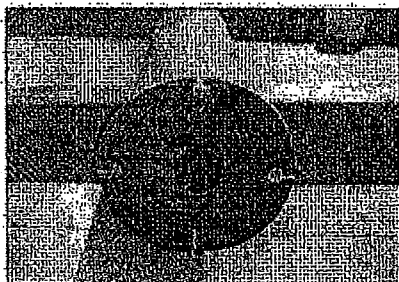


Figure 20: Standard base plate properly installed.

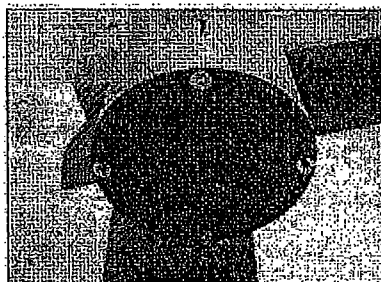


Figure 21: N-1 base plates properly installed. Note: For the "N-1" base plate option, the bolts must be installed on the inside of the base module.

### 11.0 Install Top Cap

---

Place the correctly sized top cap on the top module of an assembled pole and secure with four self tapping #8 hex head screws to pole using the pilot holes in the top cap (See Figure 22).

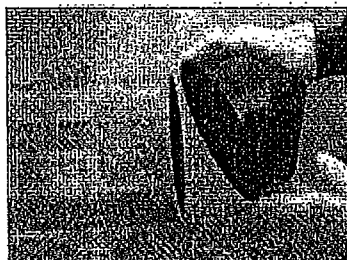


Figure 22: Top cap being installed.

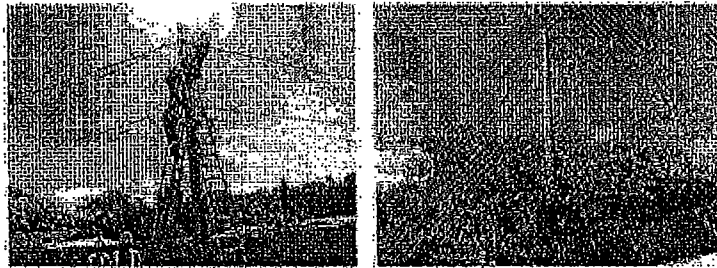
## INFRASTRUCTURE FOR LIFE®

### 12.0 Set the Pole

---

It is recommended that nylon slings be used in conjunction with the ActewAGI lifting clamps when setting RStandard® poles. The poles are very light, tapered structures, so the balance point for the pole is easy to find. It is typically located close to the center of the pole, towards the butt end. Once the proper fulcrum point for hoisting is found, industry standard practices can be followed for setting the pole.

Note: Contact between RStandard poles and sharp, hard, or abrasive tools and equipment should be avoided. These can damage the pole by scraping the surface. If this contact cannot be avoided, a buffer material (rubber, carpet, etc.) should be used.



**INFRASTRUCTURE FOR LIFE®**



RS Technologies

[www.RStandard.com](http://www.RStandard.com)

Email [Info@grouprsi.com](mailto:Info@grouprsi.com)  
Toll Free +1 877 219 8002  
Phone +1 403 219 8000  
Fax +1 403 219 8001

233 Mayland Place NE  
Calgary, AB T2E 7Z8

**For more information on this product contact:**

---

"RStandard" and "Infrastructure For Life" are registered trademarks of RS Technologies Inc.

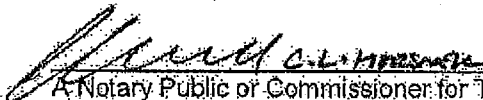
\*Disclaimer - The information contained herein is offered only as a guide for RStandard poles and has been prepared in good faith by technically knowledgeable personnel. This sheet is for information only and could be modified without notice. Printed in Canada.

RS-AIG (m) V2 2/11

Revised by Bob Spence 24 April 12 to be Approved document V5 By RS



THIS IS EXHIBIT "D" TO THE AFFIDAVIT OF  
DOUGLAS OLDFIELD MADE BEFORE ME this  
9th day of JULY, 2013

  
A Notary Public or Commissioner for Taking  
Affidavits for The United Kingdom

COLIN HERLEYS,  
Solicitor,  
26 Old Brompton Road,  
South Kensington,  
London SW7 3DL  
Tel: 020 7584 6733

---

**From:** Collins, Cath [Cath.Collins@actewagl.com.au]  
**Sent:** 21 June 2013 02:53  
**To:** 'Doug Oldfield'  
**Subject:** RE: ActewAGL RFT046 - Technical confirmation requirements for Armor

Good morning Doug,  
Thanks for the update.  
Regards,

Cath Collins JP  
Contract Specialist  
ActewAGL  
(Wed-Fri Only)

T: 02 6295 4283 | F: 02 6248 3102 | GPO Box 366, Canberra ACT 2601  
[www.actewagl.com.au](http://www.actewagl.com.au)

Please consider our environment before printing this email.

---

**From:** Doug Oldfield [mailto:doug@armoraustralia.com]  
**Sent:** Thursday, 20 June 2013 1:24 PM  
**To:** Collins, Cath  
**Subject:** RE: ActewAGL RFT046 - Technical confirmation requirements for Armor

Hi Cath

Our Quality Certification yesterday by SAI Global went well yesterday and I am glad to say that we passed. We should have the certificate within 2 weeks.

Kind Regards,

*Doug Oldfield*



**Australasian Sales Manager**  
Armor Utility Structures Pty Ltd  
448 The Boulevard  
Kirrawee, NSW 2232

(ph) +61 2 9521 1901  
(mob) +61 (0) 414 905 288  
(fax) +61 2 9521 1941

---

**From:** Collins, Cath [mailto:Cath.Collins@actewagl.com.au]  
**Sent:** Friday, 14 June 2013 12:42 PM  
**To:** 'Doug Oldfield'  
**Subject:** RE: ActewAGL RFT046 - Technical confirmation requirements for Armor

Good afternoon Doug,

I just thought I would give you a quick update on the progress of this tender evaluation.

We will not meet the schedule that was outlined in the original tender document, and are not expecting a decision until later this month or early July.

If you could provide us with an update as to how your Quality Certification Audit goes next week that would be greatly appreciated.

Regards,

Cath Collins JP  
Contract Specialist  
ActewAGL  
(Wed-Fri Only)

T: 02 6295 4283 | F: 02 6248 3102 | GPO Box 366, Canberra ACT 2601  
[www.actewagl.com.au](http://www.actewagl.com.au)

Please consider our environment before printing this email.

---

**From:** Doug Oldfield [<mailto:doug@armoraustralia.com>]

**Sent:** Friday, 24 May 2013 4:25 PM

**To:** Collins, Cath

**Subject:** RE: ActewAGL RFT046 - Technical confirmation requirements for Armor

Hi Cath

Audit is booked in for the 19<sup>th</sup> June

Kind Regards,

*Doug Oldfield*



**Australasian Sales Manager**

Armor Utility Structures Pty Ltd

448 The Boulevard

Kirrawee, NSW 2232

(ph) +61 2 9521 1901

(mob) +61 (0) 414 903 288

(fax) +61 2 9521 1941

---

**From:** Collins, Cath [<mailto:Cath.Collins@actewagl.com.au>]  
**Sent:** Friday, 24 May 2013 3:23 PM  
**To:** 'Doug Oldfield'  
**Subject:** RE: ActewAGL RFT046 - Technical confirmation requirements for Armor

Good afternoon Doug,

Just a quick follow-up in relation to your Quality System response.

You have stated that you are expecting certification by the end of July, have you been provided with an actual date for your certification audit?

Thank you,

Cath

---

**From:** Doug Oldfield [<mailto:doug@armoraustralia.com>]  
**Sent:** Wednesday, 8 May 2013 12:32 PM  
**To:** Collins, Cath  
**Subject:** RE: ActewAGL RFT046 - Technical confirmation requirements for Armor

Hi Cath

Please see the responses in Red below and attachments.

Kind Regards,

Doug Oldfield



**Australasian Sales Manager**

Armor Utility Structures Pty Ltd.

448 The Boulevard

Kirrawee, NSW 2232

(ph) +61 2 9521 1901

(mob) +61 (0) 414 905 288

(fax) +61 2 9521 1941

**From:** Collins, Cath [<mailto:Cath.Collins@actewagl.com.au>]  
**Sent:** Wednesday, 1 May 2013 12:41 PM  
**To:** 'Doug Oldfield' ([doug@armoraustralia.com](mailto:doug@armoraustralia.com))  
**Subject:** ActewAGL RFT046 - Technical confirmation requirements for Armor  
**Importance:** High

Good morning, Doug,

Thank you for submitting your tender for the supply of composite fibre electricity poles.

Before we can continue with our evaluation, the following information is required from you.

1. Mandatory Criteria 10 - Quality System -- We note that Armor has provided us with a certificate acknowledging you have applied for ISO9001 Certificate. Have you been given any indication of the timeframe it will take for the certification process to be completed/initial assessment conducted. We are expecting certification by end of July.
  1. Can you provide us with a copy of your Quality Manual, or evidence of your responses to D1 questionnaire responses 4-11. (we note you have provided your quality policy that meets the requirements of question 3) Quality Manual Attached. I have provided an abbreviated summary. Please advise if you require a more comprehensive answer on sections of interest.
  
2. Schedule D2 - Non-compliance & Qualifications

## D3.2 -- Financial Information

We note that Armor has not provided the requested financial information in D3.2 as it is against company policy. As you will appreciate, the financial viability of companies that provide services for such critical infrastructure is of the utmost importance.

1. Can Armor provide responses to D3.2(b) Armor has No threatened or pending litigation, claims or undischarged judgements or orders (c)? Major debtor: AUS Exclusively sells the RS pole and related hardware. Armor Utility Structures over the last 12 months has sold only to a handful of Australian Utilities, including ActewAGL, Ausgrid, Essential and also a local recreational pole user. At present there is nil outstanding creditors. The major creditor is RS and there are 2 LC's raised to purchase the current ActewAGL orders and a smaller LC for 1 order from the recreational pole application.
2. If Armor were to be shortlisted for this contract, would you provide the requested information, or a Statement of Financial Viability from your accountant that covers: Yes if Armor is shortlisted.
  1. Value of current assets
  2. Value of current liabilities
  3. Net profit ratio (%) (net profit divided by revenue)
  4. Gross profit ratio (%) (net profit divided by revenue)
  5. Return on assets (%) (net profit divided by total assets)
6. Can Armor provide responses to D3.2(b) and (c)? See above.

## D3.2 -- Key Performance Indicators

3. Is / will Armor be developing systems to report key performance indicators. It is quite simple for Armor to develop a system to monitor KPI's. The main KPI will be accuracy of delivery (timewise) and conformity of product. If successful Armor will gladly monitor and provide quarterly KPI's. Armor has a perfect record with ActewAGL of 0 rejects from over 2200 poles supplied.
4. Is Armor currently able to provide any performance criteria information (such as Delivery in Full on time) I have reviewed the orders from ActewAGL for the last 12 months. The delivery dates compared to the estimate does not give a true indication of on time delivery as we worked diligently with your procurement department and certain orders were re-scheduled and amended, thus increasing the variance of delivery date compared to original estimate.

## Part B6.1 (contract terms)

5. Please confirm that Armor does not have the same Insurance limitations as specified in the RS non-compliance documentation provided by you. I assume you mean RS's CAD\$15M. Armor has \$20M Public and Product Liability insurance (see attached)

### Technical queries

We understand you may need to seek additional responses from your manufacturer for these questions, they will be asked for the same technical information, and given the same deadline to respond.

3. A20, 21 and 22 of the Schedule has conflicting information. We require confirmation of the following;

Design/working load is 8kN and not the stated 34.1kN (Option 1). Provided PLS calculations in the tender documentation appear to support this assumption. Module 0203 9.5m 8/32kN sold as an 8ka working load 32kN Ultimate load.

1. 34.1kN is the expected failure load at the tip for option 1
4. Tender section A5, RS document: Kinetics Electrical Test Report 11 April 2006 is not signed. Copy of the signature page is required. Refer RS. If RS have not rectified this, then we are unable to.
5. There does not appear to be a test to destruction of a combined module two and three (currently supplied configuration). This test is required. Refer RS. We have requested this from RS previously, however it has never been available. Unless RS have conducted one recently for the tender, it is not available.
6. As per clause 16 of the technical specification no FMBA has been provided. This is a mandatory requirement of the tender (see page 16 of the Request for Tender document) Limited pole use risk assessment has been completed in the installation instructions. Although it appears that RS have covered all of the perceived modes of failure in all the tests they have completed there is no summary of risk and risk mitigation available. If RS have not supplied, we are unable to supply.
7. As per clause 13.3.2 of the technical specification no confirmation of the minimum electrical resistance of  $10^5$  Ohms was made available nor was there any test information provided around leakage current for polluted poles. Refer RS response. If RS have not been able to supply, then we are unable to.

8. To confirm that adequate information is available for future inspection and maintenance we require the provision of RS document numbers WI-7013, WI-7014 and WI-7015. Please refer attached.

Please provide responses to the queries above by Wednesday 8 May, 5:00pm Australian Eastern Standard time

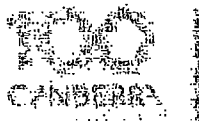
Cath Collins JP  
Contract Specialist

ActewAGL

(Wed-Fri only)

T: 02 6295 4283 | F: 02 6248 3102  
GPO Box 366 Canberra ACT 2601

[www.actewagl.com.au](http://www.actewagl.com.au)



Principal Partner



ACTEWAGL

Please consider our environment before printing this email.

**CONFIDENTIAL:** This email and any attachments may be confidential. If received in error, please delete all copies and advise the sender. The reproduction or dissemination of this email or attachments is prohibited without the consent of the sender.

**WARNING: BE VIRUSES.** Our computer systems sweep incoming email to guard against viruses, but no warranty is given that the email or its attachments are virus free. Before opening or using attachments, please check for viruses. Our liability is limited to the re-supply of any infected attachments.

Any views expressed in this message are those of the individual sender, except where the sender expressly, and with authority, states them to be the views of the



organization.

-----

-----

-----

**"PLEASE NOTE"** This email and any attachments may be confidential. If received in error, please delete all copies and advise the sender. The reproduction or dissemination of this email or its attachments is prohibited without the consent of the sender.

**WARNING: RE: VIRUSES:** Our computer systems sweep outgoing email to guard against viruses, but no warranty is given that this email or its attachments are virus free. Before opening or using attachments, please check for viruses. Our liability is limited to the re-supply of any affected attachments.

Any views expressed in this message are those of the individual sender, except where the sender expressly, and with authority, states them to be the views of the organization.

-----

-----

**"PLEASE NOTE"** This email and any attachments may be confidential. If received in error, please delete all copies and advise the sender. The reproduction or dissemination of this email or its attachments is prohibited without the consent of the sender.

**WARNING: RE: VIRUSES:** Our computer systems sweep outgoing email to guard against viruses, but no warranty is given that this email or its attachments are virus free. Before opening or using attachments, please check for viruses. Our liability is limited to the re-supply of any affected attachments.

Any views expressed in this message are those of the individual sender, except where the sender expressly, and with authority, states them to be the views of the organization.

-----

-----

**"PLEASE NOTE"** This email and any attachments may be confidential. If received in error, please delete all copies and advise the sender. The reproduction or dissemination of this email or its attachments is prohibited without the consent of the sender.

**WARNING: RE: VIRUSES:** Our computer systems sweep outgoing email to guard against viruses, but no warranty is given that this email or its attachments are virus free. Before opening or using attachments, please check for viruses. Our liability is limited to the re-supply of any affected attachments.

Any views expressed in this message are those of the individual sender, except where the sender expressly, and with authority, states them to be the views of the organization.

-----