

# LISTING REPORT INTERTEK TESTING SERVICES NA INC.

3933 US Route 11 Industrial Park

Cortland, NY 13045, USA

Job No. 3125796

Issued: September 12, 2007  
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REPORT NO. 3125796CRT-001b

INSPECTION, TESTS AND EVALUATION  
OF A  
SolaDeck Enclosure

RENDERED TO

RSTC Enterprises, Inc.  
Eau Claire, WI, USA

**GENERAL:** This Report gives the results of the inspection, tests and evaluation of a SolaDeck Enclosure for compliance with the Standard listed below. This investigation was authorized by Intertek quote numbers 500031475 dated June 4, 2007 and 500047381 dated August 27, 2007. The investigation was begun on June 25, 2007 and completed on August 31, 2007. A production-line sample in good condition was provided by the client on June 8, 2007 and tested at Intertek's Cortland, NY facility.

UL 50 Standard for Safety for Enclosures for Electrical Equipment,  
Eleventh Edition dated October 19, 1995  
with revisions through and including September 12, 2003

**Applicant:** RSTC Enterprises, Inc.  
2219 Heimstead Road  
Eau Claire, WI 54703 USA

**Contact:** Mr. Steve Capozzi  
**Phone:** (715) 830-9997  
**Fax:** (715) 830-9976

**Manufacturer:** Same as Applicant



**Contact:**  
**Phone:**  
**Fax:**

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<u>Report Composition:</u>	<u>Numbering</u>
Cover	1
Revisions	2
Main Report	3-11
Components Requiring Yearly Testing	12 - 13
<u>Total Number of Pages</u>	13

REVISION SUMMARY - The following changes have been made to this Report:

<u>Date/ Proj # Off ID</u>	<u>Project Handler/ Reviewer</u>	<u>Page</u>	<u>Item</u>	<u>Description of Change</u>
Sep. 26, 2008 3162308	Ray Dunnigan  Kenneth L. Morgan, Jr. 	3	-	Changed description to include threaded stud, star washer and nut as alternative fasteners for ground lug.
		11	3	Added steel threaded stud, star washer and steel nut as alternative fastener. Also added Square D model PK4GTA grounding bar as alternative grounding lug.

**PRODUCT DESCRIPTION**

PRODUCT COVERED

SolaDeck Enclosure

PRODUCT DESCRIPTION

The sample is a draw formed, painted, galvanized sheet metal enclosure. It employs a removable cover which is mounted to the enclosure base by four machine screws. Also an aluminum cable stay is riveted to the interior and a ground lug is fastened to the interior using a rivet or steel threaded stud, star washer and steel nut. The sample is intended for installation on a shingled roof to provide a weather-tight wiring space.

RATINGS

Product

SolaDeck Enclosure

Enclosure Type

Type 3R

**TEST PERFORMANCE NO. 1**

A representative sample of the product was tested in accordance with UL 50 Standard for Safety for Enclosures for Electrical Equipment, Eleventh Edition dated October 19, 1995 with revisions through and including September 12, 2003.

The following tests were performed:

<u>Test Description</u>	<u>UL 50 Clause</u>
Rain Test	30
Icing Test	34.2
Gasket Test	43
Protective Coating	15

Results of the tests indicate the specimen conforms to applicable test criteria.

**CONCLUSION**

A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of UL 50 Standard for Safety for Enclosures for Electrical Equipment, Eleventh Edition dated October 19, 1995 with revisions through and including September 12, 2003.

Report prepared by:

***Signature On File***

Frank A. Ruggeri  
Engineer

Report reviewed by:

***Signature On File***

Kenneth L. Morgan, Jr.  
Engineering Team Leader

### **GENERAL INFORMATION**

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

### **COMPONENTS**

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

### **LISTING MARK**

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

### **MANUFACTURING AND PRODUCTION TESTS**

Manufacturing and Production Tests shall be performed as required in this Report.

### **FOLLOW-UP SERVICE**

Periodic unannounced audits of the manufacturing facility shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

## **GENERAL REQUIREMENTS AND DEFINITIONS**

Recognized Component – A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component – A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component – A part that has not been previously evaluated to the appropriate designated component standard. It may also be a listed or recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Component – An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the following photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Spacing – No electrical circuits employed.
2. Mechanical Assembly - Components such as switches, fuseholders, connectors, wiring terminals and display lamps are reliably mounted and prevented from shifting or rotating by lockwashers, starwashers, or the mounting format.
3. Corrosion Protection - All ferrous metal parts are suitably protected against corrosion by painting.
4. Grounding - All exposed dead-metal parts and all dead-metal parts within the enclosure that are exposed to contact during any servicing operation and that are likely to become energized are reliably connected to the equipment grounding terminal.
5. Internal Wiring – No electrical circuits or internal wiring employed.
6. Schematics – No electrical schematics requiring verification.
7. Accessibility of Live Parts - No electrical circuits employed. No live parts present.
8. Markings - The product is marked on a component labeling system as follows:
  - Manufacturer's Name
  - Model Designation
  - Enclosure Type and
  - A grounding Symbol must be present near the grounding lug.
9. Cautionary Markings – None required.
10. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer.

**MANUFACTURING AND PRODUCTION TESTS**

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

Required Tests

None Required.

The sample is an enclosure, has no live parts, is not cord connected and is not a pressure vessel.

**CORRELATION PAGE FOR MULTIPLE LISTINGS**

MULTIPLE LISTING

The following products which are identical to those identified in the index except for model number and participant name are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program

MULTIPLE LISTEE                      None

BASIC LISTEE

MANUFACTURER

PRODUCT

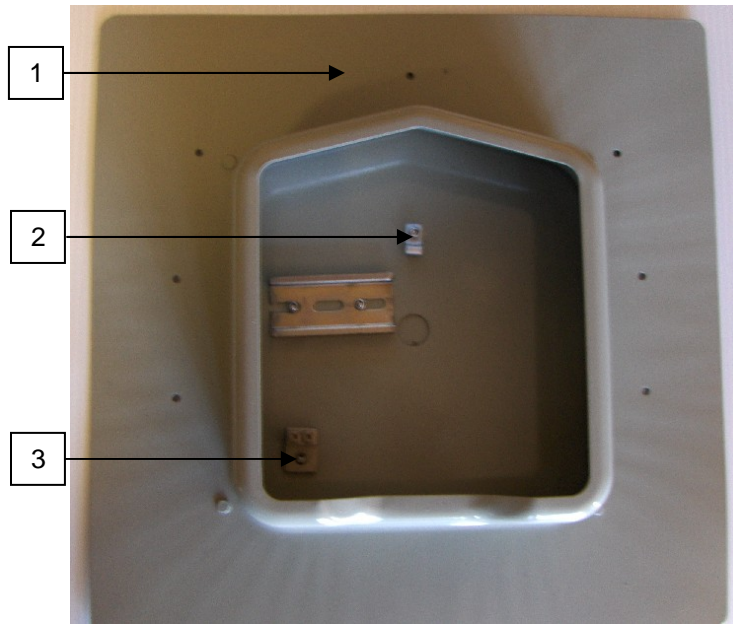
MULTIPLE LISTEE  
MODEL NO. \_\_\_\_\_

BASIC LISTEE  
MODEL NO. \_\_\_\_\_

BASIC LISTEE  
ORDER NO. \_\_\_\_\_

SolaDeck Enclosure

PHOTO NO. 1



SolaDeck Enclosure

PHOTO NO. 1

<u>Item</u>	<u>Title</u>	<u>Description</u>
1.	Enclosure Base	Critical Component. Enclosure base. Painted, 18 gauge, draw formed galvanized steel. 0.055 inches thick. Measuring 15 inches wide by 15 inches long. Formed as shown.
2.	Cable Stay	Critical Component. Aluminum cable stay. Riveted to enclosure interior. Manufactured by Diamond/Sachs, part number SC-20-1. Alternate: Diamond/Sachs, part number SC-19-1.
3.	Grounding Lug	Recognized Component. Aluminum grounding terminal, 2 position, suitable for wire sizes 17AWG through 10 AWG, fastened to enclosure interior using a rivet or steel threaded stud, star washer and steel nut. Manufactured by ComponexX, part number AGC-5. Alternate: Electric Motion, part number EM2511. Alternate: Square D, grounding bar kit, part number PK4GTA
4.	Enclosure Cover	Critical Component. Enclosure cover. Painted, 18 gauge, draw formed galvanized steel. 0.055 inches thick. Measuring 8.75 inches wide by 10.75 inches long at it's longest point. Formed as shown.
5.	Foam Gasket	Critical Component. Not shown. Closed cell foam gasket applied to interior of enclosure cover. 6 inches long, 1 inch high, 1 inch wide.

SolaDeck Enclosure

**Evaluation of Unlisted Components**

Because unlisted components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The unlisted components in the table below require testing and/or evaluation as indicated.

**Note to Intertek Follow Up Inspector: The Component Evaluation Center, CEC, will notify you in writing when these components must be selected and sent to the CEC for re-evaluation**

Ship the samples to: Intertek Testing Services  
Component Evaluation Center  
3933 US Route 11  
Cortland, NY 13045  
USA

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return **must** accompany the initial component shipment.

The Unlisted Components covered by this report are shown in the following Table:

Photo No.	Item No.	Component Description	Manufacturer	Catalog No.	Frequency*	Qty**	Send to CEC (YES or NO)	Required Action***
		NONE						

\* Quarterly, semi-annual, annual.

\*\* note: Indicate any samples not available and provide the anticipated date that the component will be available.

\*\*\* Required Action (select one of the three):  
Visual  
Partial  
Full Evaluation

Note:  
Visual means the quarterly verification of the description of the unlisted component in the report is sufficient for Certification.