REVISION 2.0 – CHANGE DOCUMENT OWNER AND APPROVER. CHANGES TO CLASUES IN EMBEDED DOCUMENT.

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# Purpose

## The purpose of this document is to provide guidance for the completion of Construction Review Datasheets (CRD) for compliance with UL’s DAP requirements.

# Scope

## These instructions apply to all certification projects involving the UL Mark for Canada (cUL and cUR).

## These instructions also apply to certification projects involving component evaluation under UL’s Unlisted Component Program to the Canadian Standard referenced in the end product Standard. A separate CRD against the referenced Standard for the Unlisted Component is required.

# General

## A CRD shall be completed if construction details that are specified in the Canadian requirements are being applied for the investigation. This would include bi-national and tri-national requirements. If there is no actual construction change to the product (e.g. a rating change only or change in model designation) or new model that is the same as the existing certified model except for model designation being added to the file and therefore no need to re-evaluate the construction, a CRD would not be needed.

## When the primary product standard references other standards, only a single CRD for the primary product Standard is required. If a product involved a component that is to be separately evaluated to the referenced component standard and resulting in a separate Report, then a separate CRD for the referenced component standard shall be completed.

## CRD is not required for General Coverage categories. However, when a product constructed with features that do not comply with the specific construction described in the Follow-Up procedure for general coverage, a construction review shall take place and a full CRD shall be completed.

Note: **General Coverage** is a UL program for clients that manufacture products in specific categories (CCNs) where all or part of a UL Standard is included in the UL Follow-Up Procedure

## If creating a CB style report, refer to paragraph ‎5.4 for instructions.

## If creating IECEx System ExTRs, refer to paragraph ‎5.5 for instructions.

## The recommended method of completing the CRD is electronically.

## When only adding an additional manufacturer to a Procedure volume, a CRD is not required.

## Equipment information shall not be completed based on equipment that is anticipated to be used. Equipment information shall be recorded only after the equipment has been used and confirmed to be in working order and within its calibration cycle.

# Materials/Equipment

For CB style reports, a Report Generator such as UltraLink, UltraClient, or other tool may be used, as well as various TRF report forms for the applicable product categories.

# Requirements/Procedures

## For New Products

### Obtain the appropriate CRD template from your regular UL contact engineer for each standard used in the investigation of the product.

### Open the header and type in the project number (if known) and file number. Type the name of the staff who has been authorized by UL as the Authorized Signatory for conducting product construction review in the field of Printed name and Signature in the same font of body content. Fill in the date of the review. Close the header.

### Complete the Sample Identification and Measurement Instrument Tables as necessary.

#### When more than one model is included in a CRD, the Sample Identification Table shall identify the differences in construction. The following pre-printed statement may be checked in the CRD if appropriate.

“**[]**Indications of compliance apply to all samples identified with specific indications of compliance included for construction differences of the different samples.”

#### Measurement equipment shall be identified in the measurement Instrument Table and this table is considered the original record. The following preprinted statement shall remain unchecked since the measurement is not performed at a UL facility.

**“[]**UL measurement equipment information is recorded on Meter Use.”

#### Verify that the applicable Standard information has been pre-populated in the spaces indicated, including the Standard identification number, the version/edition (where applicable), and the Issue Date; or, if the Standard has been revised, including the Revision Date instead of the Issue Date. Use of the Standard name is optional. Update the form, as necessary, to correct any errors or omissions.

### Obtain a copy of the standard identified. It must be used in conjunction with the CRD form to provide details about the construction requirements.

### For each section or clause identified,

#### Indicate if the product construction complies, does not comply or the section or clause is not applicable .

#### Where a clause specifies a dimension, the measurement instrument(s) used to measure the dimension shall be identified (this should correlate to the measurement instrument list at the beginning of the package) The applicable dimension may be recorded in the comment column, if necessary as determined by your regular UL contact engineer.

#### The intent is to verify that the applicable sections or clauses have been reviewed to determine compliance with the requirement.

#### Where noncompliance issues exists, the nonconformance shall be noted in the comment field of the CRD and the NO column marked to allow the reviewer to note such comments. Once the client has corrected the nonconformance, either by submitting a new sample for investigation or providing documentation indicating his intent to correct, the NO shall be struckthrough and the YES column selected. The resolution shall be placed in the comment column with the noncompliance comment or included with the CRD.

#### When a requirement is deleted from or revised in a Canadian standard without a change to the standard, the Comments/Measurements column in the construction review table shall contain a reference to the document making the change and the document date (for example: “Text of Sub-clause deleted. Reference CSA TIL No. I-40 dated June 30, 2003”). .

### The completed CRD is submitted to UL for review as part of the product submittal package and supporting documentation.

## For Alternate Constructions Or New Models That Are Similar To Currently Certified Products

### Obtain the generic CRD template (as shown in the Example 2, Form Name: ULS-02377-AAAG-ConstructionReview-2002) from your regular UL contact engineer. Fill in project related information into the CRD where applicable. Alternatively, the form and procedures for a new product in [5.1](#_For_New_Products) can be used.

### Open the header and type in the project number and file number. Type the name of the Authorized Signatory conducting the construction review in the field of Printed name and Signature in the same font of body content. Fill in the date of the review. Close the header.

### Complete the Sample Identification and Measurement Instrument Tables as necessary.

#### When more than one model is included in a CRD, the Sample Identification Table shall identify the differences in construction. The following pre-printed statement may be checked in the CRD if appropriate.

“**[]**Indications of compliance apply to all samples identified with specific indications of compliance included for construction differences of the different samples.”

#### Measurement equipment shall be identified in the measurement Instrument Table and this table is considered the original record. The following preprinted statement shall remain unchecked since the measurement is not performed at a UL facility.

**“[]** UL measurement equipment information is recorded on Meter Use. ”

### Identify the applicable standard in the spaces indicated by the identification number, the version/edition (where applicable), and the Issue Date; or, if the Standard has been revised, including the Revision Date instead of the Issue Date. Use of the Standard name is optional..

### Obtain a copy of the standard identified. It must be used in conjunction with the CRD form to provide details about the construction requirements.

### Identify the applicable clause numbers, enter into the form and include a short summary of the requirement(s)

### For each section or clause identified,

#### Indicate if the product construction complies, does not comply or the clause is not applicable.

#### Where the clause specifies a dimension, the measurement instruments used to measure the dimension shall be identified (this should correlate to the measurement instrument list at the beginning of the package). The applicable dimension can be recorded in the comment column, if necessary as determined by your regular UL contact engineer. .

#### The intent is to verify that the applicable sections or clauses have been reviewed to determine compliance with the requirement. .

#### Where noncompliance issues exists, the nonconformance shall be noted in the comment field of the CRD and the NO column marked to allow the reviewer to note such comments. Once the client has corrected the nonconformance, either by submitting a new sample for investigation or providing documentation indicating his intent to correct, the NO shall be struckthrough and the YES column selected. The resolution shall be placed in the comment column with the noncompliance comment or included with the CRD.

### The completed CRD is submitted to UL for review as part of the product submittal package and supporting documentation.

## Making Changes or Error Corrections

### If an error is made, correction of the error shall be made by striking through the error (neatly line through the error if the CRD is completed manually), recording the correct information, initialing the change and providing a reason for the change (if the reason is not obvious).

### Text shall not be completely obliterated and data shall not be over written. Correction materials such as tape or “whiteout” shall not be used. .

## Completing CRDs for Products Using CB Style TRF Report Format

### This section covers instructions for completion of Construction Review Datasheets (CRD) for the C-UL Mark Program when generating a CB Scheme style TRF report whether or not a Report Generator (such as UltraLink, UltraClient, etc.) is used.

### The TRF report enables user to document clause-by-clause constructional findings of the product under evaluation.

### The TRF report template has construction data tables for recording measurements that are applicable to the product under investigation. When using report generator (such as UltraLink, UltraClient, etc.), other sections/locations within the template (e.g., General Product Information, Enclosure, Remarks & Verdict, Supplementary Information, etc.) are also available to record applicable constructional comments as appropriate.

### Only those Construction Review (CR) requirements required by the Standards Council of Canada (SCC) that are not already covered in the TRF template will need to be documented. Construction comments that are applicable to the product under investigation and measurements are recorded throughout the TRF report format, and the instruments used to measure applicable constructions shall be recorded. The Project Handler and the Reviewer are responsible for determining which measurements are applicable for each evaluation. .

### The instruments used to measure applicable constructions shall be recorded.

### When following this procedure utilizing a Report Generator (such as UltraLink, UltraClient, etc.) to generate the TRF report, other forms of comprehensive CRDs are not needed. The measurement information may be recorded in the following places: the General Product Information (GPI), Result-Remark, Supplementary Information, Enclosures, etc, portions of the report. When there is uncertain as where is the most appropriate location to document the required information, contact your UL regular contact engineer.

### When NOT using a Report Generator to create the TRF, the Construction Compliance Review Record, Generic for CB Scheme Reports Form (Form Name: ULS-02377-AAAG-ConstructionReview-2004) obtained from your UL regular contact engineer shall be completed.

### Complete the Sample Identification and Measurement Instrument Tables as necessary. (See [5.1.3](#_Complete_the_Sample) and [5.2.3](#_Complete_the_Sample_1)).

### UL is responsible to confirm the work noted above when reviewing a TRF report where applicable measurements are involved.

## Completing CRDs for Products Using IECEx Scheme ExTRs

### The IECEx Scheme ExTRs shall be completed in accordance with instruction obtained from your regular UL contact engineer. Completing IECEx Scheme ExTRs, with the following additional requirements to meet the requirements of the SCC. When following this procedure, other forms of comprehensive CRDs are not needed.

### The applicable measurement to the product to be submitted shall be documented. This information shall be recorded in the Result-Remark portion of the ExTRs.

### If there are any national differences for Canada, the IECEx Test Report of National Differences shall be completed in accordance with instruction obtained from your regular UL contact engineer in addition to the ExTR.

### Obtain the Construction Compliance Review Record, Generic for IECEx Scheme Reports (Form Name: ULS-02279-AANZ-ConstructionReview-2013) from your regular UL contact engineer.

### Open the header and type in the project number and file number into the CRD. The name of the Authorized Signatory conducting the construction review and the date of the review shall be typed in. Close the header.

### Complete the Sample Identification and Measurement Instrument Tables as described in [5.1.3](#_Complete_the_Sample) above.

### The completed CRD is submitted to your regular UL contact engineer for review.

# rECORDS

## Upon completion of examination for the construction of products, a copy of CRD shall be stored in accordance with your company’s quality system and record retention policy.

# Examples

|  |  |
| --- | --- |
| Example 1 | New Products |
| Example 2 | Alternate Construction or new Models similar to currently certified products |

CONSTRUCTION COMPLIANCE REVIEW RECORD

Sample Identification -

|  |  |  |  |
| --- | --- | --- | --- |
| Sample Card No. | Date Received | Sample No. | Manufacturer, Product Identification and Ratings |
| XXXX | 2004-08-05 | 1 | Model 123a, Audio Widget, rated 120 V, 50-60 Hz |
|  |  |  |  |
|  |  |  |  |

[]Indications of compliance apply to all samples identified with specific indications of compliance included for construction differences of the different samples.

Measurement Instrument Information -

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Inst. ID No. | Instrument Type | Function/Range | Last Cal. Date | Next Cal. Date |
| 123 | ruler | 6 in | 2004-04-01 | 2005-04-01 |
|  |  |  |  |  |
|  |  |  |  |  |

[] UL measurement equipment information is recorded on Meter Use.

The following additional information is required when using client’s or rented equipment, or when a UL ID Number for an instrument number is not used. The Inst. ID No. below corresponds to the Inst. ID No. above.

| Inst. ID No. | Make/Model/Serial Number/Asset No. |
| --- | --- |
|  |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| CONSTRUCTION COMPLIANCE REVIEW: |  |

The sample was reviewed for compliance with the construction requirements in the following Standard and compliance with applicable construction requirements is noted below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Standard | CSA C22.2 No. 1 -98 |  | Edition /  Issue or Revision Date: | 1998 / Revised: 2008-01-15 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |

| Clause/Par. Reference and Construction Requirement | Comply | | | Comments/Measurements | Inst. ID No. |
| --- | --- | --- | --- | --- | --- |
| Yes | No | N/A |
| 4. Construction | | | | | |
| 4.1 Hazards | | | | | |
| 4.1.1 Types of Hazard | X |  |  |  |  |
| 4.1.2 Corrosion | X |  |  |  |  |
| 4.2 Enclosures | | | | | |
| 4.2.1 Mechanical Strength |  |  | X |  |  |
| 4.2.2 Protection from Shock Hazard |  | X |  |  |  |
| : |  |  |  |  |  |
| 4.2.2.6 Enclosure Openings | X |  |  | Slot width xx mm  Hole diameter yy mm  Distance between opening and part involving shock hazard zz mm | 123 |
| 4.2.2.7 Tool Adjustments |  | X |  | penetrating rod length xx mm | 123 |
| 4.2.2.8 Power Supply Cord | X | ~~X~~ |  | Product was supplied with SVT Cord as opposed to SJT.  Per client's letter dated 01-26-2006, Cord will be changed to SJT. |  |
| (followed by other clauses covering all construction requirements in the standard) |  |  |  |  |  |
|  |  |  |  |  |  |

CONSTRUCTION COMPLIANCE REVIEW RECORD

Sample Identification –

|  |  |
| --- | --- |
| Currently certified product used for comparison (include Report references if not in the same report): | Model 123a, Report issued 2004-09-15 |
| Alternate construction details: | Model 123b, alternate power supply, Part No. abc, rated 240 V, 50-60 Hz. |

 No samples received or examined. Drawings or other information was provided to support the [ alternate construction. ][ revised construction. ][ addition of a new model that is similar to a currently certified product. ]



|  |  |  |  |
| --- | --- | --- | --- |
| Sample Card No. | Date Received | Sample No. | Manufacturer, Product Identification and Ratings |
| XXXX |  | 1 | Model 123b, rated 240 V, 50-60 Hz. |
|  |  |  |  |
|  |  |  |  |

[]Indications of compliance apply to all samples identified with specific indications of compliance included for construction differences of the different samples.

Measurement Instrument Information -

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Inst. ID No. | Instrument Type | Function/Range | Last Cal. Date | Next Cal. Date |
| 123 | ruler | 6 in | 2004-04-01 | 2005-04-01 |
|  |  |  |  |  |
|  |  |  |  |  |

[] UL measurement equipment information is recorded on Meter Use.

The following additional information is required when using client’s or rented equipment, or when a UL ID Number for an instrument number is not used. The Inst. ID No. below corresponds to the Inst. ID No. above.

| Inst. ID No. | Make/Model/Serial Number/Asset No. |
| --- | --- |
|  |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| CONSTRUCTION COMPLIANCE REVIEW: |  |

Due to similarity to the existing construction described under “Sample Identification”, a limited review for compliance with the construction requirements in the following Standard was conducted. The construction requirements applicable to the [ alternate ]~~[ revised ]~~ construction and compliance with those requirements are noted below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Standard | CSA C22.2 No. 1 -98 | Edition | 1998 | Revised: | 2008-01-15 |

| Clause/Par. Reference and Construction Requirement | Comply | | | Comments/Measurements | Inst. ID No. |
| --- | --- | --- | --- | --- | --- |
| Yes | No | N/A |
|  | | | | | |
| 4.2.2 Protection from Shock Hazard | X |  |  |  |  |
| 4.2.2.7 Tool Adjustments | X |  |  | penetrating rod length xx mm | 123 |
| (followed by other clauses covering requirements applicable to the alternate construction ) |  |  |  |  |  |
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|  |  |  |  |  |  |
| End of record | | | | | |