



**FORM ACCL-PC7  
ACCL FACILITY APPROVAL PROCEDURE AND  
CHECKLIST OF THE THIRD-PARTY LABORATORY**

**AHRI CERTIFICATION PROGRAM FOR AIR-COOLED (ACCL)  
WATER CHILLING PACKAGES**

**ACCL Third Party Laboratory:** \_\_\_\_\_  
**Date of Test:** \_\_\_\_\_  
**Test Stand Inspection Report Number:** \_\_\_\_\_  
**Test Results:** \_\_\_\_\_

Instructions: The following Third Party Test Stand Approval Procedure and Checklist is to be used by AHRI or a representative contracted by AHRI (Representative) to conduct Test Stand inspections for the Air-Cooled (ACCL) Water Chilling Packages Certification Program at a Laboratory test stand (test stand). This Test Stand Approval Procedure and Checklist is to be used in conjunction with the AHRI General Operations Manual (OM) for AHRI Certification Programs, the ACCL OM and the latest edition of AHRI Standard 550/590 (I-P) or AHRI Standard 551/591 (SI) (Standard). Where the AHRI General OM, the ACCL OM and this Test Procedure and Checklist differ, the other documents shall prevail. The completed checklist shall be maintained by AHRI upon the completion of the review.

If the Test Stand fails to comply with the conditions listed below:

- Notify AHRI
- Notify Third-Party Laboratory

**REVIEW OF CHANGES IN OPERATION**

- This is a first-time test stand approval
- No changes made which would impact results of previous inspection
- Changes made in operations that affect results of previous inspection
  - Changes have occurred in test facilities
  - Changes have occurred in test equipment
  - Changes have occurred in laboratory personnel
  - Changes have occurred in supervisory/management staff
  - Changes have occurred in testing capability
  - Other

### Pre-Visit/Preliminary Approval

Confirm that the following Testing Documents have been submitted by the Laboratory and conduct verification steps associated with each document in order to grant preliminary approval of the Test Stand:

- |       |       |  |
|-------|-------|--|
| _____ | _____ | 1. ACCL-FA1: Application for Witness Testing<br>a. Verify form is completed in its entirety  |
| _____ | _____ | 2. ACCL-FA2: Personnel Experience Questionnaire<br>a. Verify form is completed in its entirety   |
| _____ | _____ | 3. ACCL-FA3: Test Stand and Equipment Questionnaire<br>a. Verify form is completed in its entirety<br>b. Verify water flow capability match minimum and maximum cooling capacity of the Test Stand<br>c. Verify maximum airflow meets or exceeds the largest capacity chiller<br>d. Verify Power Supply is suitable for the equipment being tested<br>e. Familiarize yourself with the answers to all of the questions. Contact the Laboratory to resolve any issues<br>f. Identify all "NO" answers. Contact the Laboratory to resolve any issues |
| _____ | _____ | 4. ACCL-FA4: Calibration Summary<br>a. Verify form is completed in its entirety<br>b. Verify that calibration has been properly conducted<br>c. Verify that all Systems meet the required accuracy per Table C1 of the Standard over the intended range-of-use for the System  |
|       |       | 5. Calibration report(s) showing dates of last calibration of each System/Instrument<br>a. Verify that each instrument listed in ACCL-FA4 is also listed in the Calibration report(s)<br>b. Verify that all Systems/Instruments will have current calibrations at the time of the Witness test   |
| _____ | _____ | 6. Schematic drawing of the area of the Test Stand in which AHRI certification testing will be conducted<br>a. Verify that the information is reasonable   |
| _____ | _____ | 7. Drawings of Air Sampling Tree (See Figure E3 of the Standard)<br>a. Verify that the Air Sampler design is reasonable  |
| _____ | _____ | 8. Schematic drawing or photographs of placement of the Air Sampling Trees for each condenser coil configuration to be tested<br>a. Verify that Air Sampler placement is reasonable<br>b. Verify that all coil configurations are represented  |

**Pre-Visit/Preliminary Approval (cont)**

- \_\_\_\_\_      \_\_\_\_\_      9.      Photographs of the Test Stand in which AHRI certification testing will be conducted, which shall include sufficient views to show the location and connection of each instrument as well as the location and connect of the ports to be used by the Laboratory during testing
- a.      Verify that photographic views show all instruments
  - b.      Verify that the test elements (instruments, equipment, power wires, etc.) seem reasonable

Determine whether the Facility should be granted preliminary approval:

- \_\_\_\_\_      \_\_\_\_\_      If NO:
- Inform AHRI
  - Inform the Laboratory of additional information and/or changes that are required.
  - Upon receipt of additional information and/or confirmation of changes, make a determination whether to grant preliminary approval of the Test Stand or not

- \_\_\_\_\_      \_\_\_\_\_      If YES:
- Inform AHRI
  - Make arrangements for Facility inspection

Prior to the Test Stand Inspection, confirm the following with the Laboratory:

\_\_\_\_\_      \_\_\_\_\_      A chiller must be *operated* at 100% and 25% load points for the inspection

\_\_\_\_\_      \_\_\_\_\_      The capacity of the chiller used for the inspection must be at least 85% of the maximum capacity of the Test Stand being inspected

**Day of Inspection at Third-Party Laboratory Test Stand**

_____	_____	<p>Upon arrival, request a brief meeting of the involved parties to review the following information:</p> <ol style="list-style-type: none"> <li>1. Safety rules at the site</li> <li>2. Completed forms ACCL-FA1-4</li> <li>3. Schedule of testing/inspection</li> </ol>
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**FACILITY INSPECTION: VERIFICATION OF HARDWARE**

_____	_____	<p>Verify that capacity of the chiller being used for the inspection is at least 85% of the maximum stated capacity of the Test Stand (as stated in ACCL-FA3). If the Test Stand Inspection is not conducted in conjunction with an AHRI Certification Test, then the chiller must be run at 100% and 25% (or lowest available capacity step) test points and data must be collected to verify facility capabilities</p>
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_____	_____	<p>Verify all instrument applications as described in ACCL-FA3:</p> <ol style="list-style-type: none"> <li>1. All instruments are being applied in accordance with the Standard</li> <li>2. ACCL-FA3 descriptions match actual installations and usage</li> <li>3. Calibration stickers are current and properly installed on all instruments</li> </ol>
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_____	_____	Verify proper installation of test chiller in test room
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_____	_____	Verify proper installation of Air Sampling Trees
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**OPERATION OF CHILLER: TEST STAND CONTROL AND DATA ACQUISITION**

- |       |       |  |
|-------|-------|--|
| _____ | _____ | 1. Start chiller and achieve stable 100% load conditions   |
| _____ | _____ | <ul style="list-style-type: none"> <li>• Observe Test Stand operation and record any unusual circumstances</li> </ul> <hr/> <hr/>                  |
| _____ | _____ | <ul style="list-style-type: none"> <li>• Note the time it takes to get to start up to stable 100% conditions</li> </ul>                            |
| _____ | _____ | <ul style="list-style-type: none"> <li>• Have the Laboratory run a test (collecting all data) according to the Standard</li> </ul>                 |
| _____ | _____ | <ul style="list-style-type: none"> <li>• Verify Laboratory's data is recorded as per Sections C3.1.2, C5.1 and C5.2 as per the Standard</li> </ul> |
| _____ | _____ | <ul style="list-style-type: none"> <li>• Did you observe any limitations of the Test Stand?</li> </ul>   |

REPRESENTATIVE INITIALS	DATA POINT (IF APPLICABLE)
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**Day of Inspection at Third-Party Laboratory Test Stand (cont)**

\_\_\_\_\_      \_\_\_\_\_      2. Achieve stable 25% load conditions or the minimum unloaded capacity of the chiller

- \_\_\_\_\_      \_\_\_\_\_      • Observe Facility Test Stand operation and record any unusual circumstances

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- \_\_\_\_\_      \_\_\_\_\_      • Note the time it takes change from 100% down to stable part-load conditions

- \_\_\_\_\_      \_\_\_\_\_      • Have the Laboratory run a test (collecting all data) according to the Standard

- \_\_\_\_\_      \_\_\_\_\_      • Verify Laboratory's data is recorded as per Sections C.3.1.2, C5.1 and C5.2 as per the Standard

- \_\_\_\_\_      \_\_\_\_\_      • Did you observe any limitations of the Test Stand?

Determine whether the Test Stand should be granted preliminary approval:

\_\_\_\_\_      \_\_\_\_\_      If NO:

- Identify specifically what additional information and/or changes are required
- Determine whether the additional information and/or changes can be completed during this inspection visit or if another test stand inspection must be scheduled for a later date

\_\_\_\_\_      \_\_\_\_\_      If YES:

- AHRI will issue Test Stand Approval Certificate

**This checklist & all supporting documents have been reviewed & approved by:**

\_\_\_\_\_  
PRINTED NAME OF REPRESENTATIVE

\_\_\_\_\_  
SIGNATURE OF REPRESENTATIVE

\_\_\_\_\_  
DATE