

POOL P	RE-START-UP CHECKLIST
Revision Number	9.0
Last Review Date	September-6-2024

IMPORTANT: This is a controlled document subject to periodic reviews and updates. **NEVER** save a blank copy. A new copy for each use can be requested by emailing Scheduling@dehumidifiedairservices.com. A separate Pre-Start-Up Checklist must be completed and returned for each dehumidifier in which scheduling is being requested for.

All applicable fields must be digitally completed, and this form returned to Scheduling@dehumidifiedairservices.com to begin the scheduling process. Failure to complete all related fields **in full** will result in denial and return of this form, and delay in scheduling of your start-up as a result. This document should be completed by the installing contractor/start-up agency who will be onsite during the Factory Assisted Start-up.

*** Once the start-up schedule is confirmed by DASV, any modifications or cancellations to the schedule within 96 hours (4 business days) of the confirmed site visit date will be charged a modification fee between \$500 and \$2,500 USD per unit. The Terms and Conditions on page 6 and 7 must be reviewed and accepted prior to the return of this document. ***

CURRENT DATE (MM/DD/YYYY)	PROJECT NAME	
UNIT SERIAL #	UNIT MODEL #	
PROJECT ADDRESS		
CITY	STATE/PROVINCE	ZIP/POSTAL CODE
INSTALLATION TYPE (CHECK ONE):	NEW CONSTRUCTION	REPLACEMENT UNIT 🗌
/// 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
could lead to unit malfunction, damage personnel attemp		
could lead to unit malfunction, damage personnel attemp	, or personal injury. Manufacturer reserves to oting a start-up are deemed as not qualified factory Supervised Start-Up Schedulo	the right to limit or refuse to provide technical assistance if by Dehumidified Air Services (DASV).
could lead to unit malfunction, damage personnel attemp F	or personal injury. Manufacturer reserves to ting a start-up are deemed as not qualified factory Supervised Start-Up Schedule (YYY) ALTERNATION	the right to limit or refuse to provide technical assistance if by Dehumidified Air Services (DASV). e Request Details
could lead to unit malfunction, damage personnel attemp F REQUESTED START-UP DATE (MM/DD/Y	or personal injury. Manufacturer reserves to ting a start-up are deemed as not qualified factory Supervised Start-Up Schedule (YYY) ALTERNATION	the right to limit or refuse to provide technical assistance if by Dehumidified Air Services (DASV). e Request Details IVE DATE (MM/DD/YYYY) G CONTRACTOR/START-UP COMPANY NAME

Document Number: SR-0091-F-EN **Effective Date**: November-16-2020



POOL PRE-START-UP CHECKLIST						
Revision Number	9.0					
Last Review Date	September-6-2024					

Section A-Dehumidifier Installation Checklist

ITEM		YES	NO	N/A	COMMENTS
A1	Equipment was inspected for damage upon delivery. If damage was present, findings have been reported/resolved				
	Indicate dehumidifier installation location- Check one*				
	Mechanical room, floor mounted				
	Mechanical room, suspended				
A2	Outdoor rooftop				
	Outdoor ground level				
	Other- If YES specify location				
А3	Dehumidifier and OACC/OAFC is level and vibration isolated				
A4	Condensate P-trap(s) and drainline(s) installed, tested and primed (Evaporator drain pan, HR loop, etc.)				
A5	Ductwork connected, sealed, and insulated at dehumidifier				
A6	Outdoor air duct connected to OA collar on dehumidifier				
Α7	Test and Balance completed**				
A8	Pool water is connected to dehumidifier and flow/external pumps verified				
A9	Space heater piping, gas, and/or electrical connected and operation verified***				
A10	All electrical and other penetrations are sealed				
A11	Area surrounding Dehumidifier and OACC/OAFC cleared of debris and clear access provided to equipment				
A12	Pictures obtained of dehumidifier				

*Access to the equipment (Ladder, Scaffolding, Catwalk, etc.) must be provided by the installing contractor for the entire duration of start-up. **
It is ideal to complete test and balance for airflow, and fluid loops prior to start-up to ensure testing and adjustments are made under design conditions. *** When a gas heater is used, gas piping must be leak checked, gas supply turned on to unit, and air purged prior to start-up. When hydronic heating is used, the external boiler must be enabled, and loop heated for testing during start-up. When an electric heater is used, power supply must be verified, and power supplied to the heater during start-up.

Section B- Mechanical Room and Natatorium Checklist

	ITEM	YES	NO	N/A	COMMENTS/DATA	
B1	Ductwork, registers, and diffusers installed in natatorium					
B2	Construction substantially completed- All doors and windows installed, and natatorium cleaned					
В3	Natatorium is or will be heated to design conditions +/-2deg prior to the scheduled start-up date *					
B4	Pool is filled and is, or will be heated to at least 75° deg. prior to the scheduled start-up date**					



POOL PRE-START-UP CHECKLIST							
Revision Number	9.0						
Last Review Date	September-6-2024						

	ITEM	YES	NO	N/A	COMMENTS/DATA
B5	Obtain pictures of the natatorium and mechanical room				
sche 2de	e Natatorium must be heated, preferably to design specified condition aduled date for start-up. When design specified conditions are less that it is a second water should prefer prior to start-up.	an 80°	deg., ı	natatoriu	um must be heated to design temperature +/-

Section C- OACC Installation

1					
	ITEM	YES	NO	N/A	COMMENTS/DATA
C1	Is an OACC (Condenser) installed - If NO skip remainder of Section C				
C2	OACC installation location - Check one				
	Packaged				
	Ground level				
	Roof				
	Other- If YES , Specify				
С3	Elevation difference - Check one				Feet of elevation difference
	OACC above dehumidifier				
	OACC below dehumidifier				
	OACC level with dehumidifier				
C4	Indicate one-way lineset length (Linear)				Feet
C5	Nameplate lineset sizes (Discharge line/ Liquid line)				Discharge Line Liquid Line
C6	lineset pipe size is correct - Indicate pipe sizes				Discharge LineLiquid Line
C7	Lineset/OACC field charge added - indicate amount				PoundsOunces
C8	Pictures obtained of OACC				

Section D- OAFC Installation

	ITEM	YES	NO	N/A	COMMENTS/DATA
D1	Is an OAFC (Fluid Cooler) installed - If NO skip remainder of Section				
D2	OAFC installation location - Check one				
	Packaged				
	Ground level				
	Roof				
	Other- If YES , Specify				
D3	Elevation difference- Check one				Feet of elevation difference



POOL PRE-START-UP CHECKLIST Revision Number 9.0 Last Review Date September-6-2024

	ITEM	YES	NO	N/A	COMMENTS/DATA
	OAFC above dehumidifier				
	OAFC below dehumidifier				
	OAFC level with dehumidifier				
D4	Indicate one-way fluid pipe length (Linear)				Feet
D5	Nameplate fluid loop pipe sizes				
D6	Fluid loop Pipe size				
D7	Fluid loop filled with glycol and purged of air				Standing Glycol Pressure (PSI)
D8	Pictures obtained of OAFC				

Section E- Third Party Condenser Loop

-	Section 2 Time Fairly Condenser 2005							
	ITEM	YES	NO	N/A	COMMENTS/DATA			
E1	Is dehumidifier connected to a third-party condenser loop- If NO , skip remainder of section E							
E2	Indicate condenser loop type - Check one							
	Chilled water							
	Geothermal loop							
	Open loop cooling tower							
	Closed loop cooling tower							
	Other - IF YES, specify							
E3	Third party condenser loop is filled and purged of air							
E4	Head pressure control valve is field installed							
E5	Third party contender loop is fully operational							

Section F- Electrical and Controls Checklist

	ITEM	YES	NO	N/A	COMMENTS/DATA
F1	Electrical service is connected to Dehumidifier and OACC/OAFC				
F2	All breakers, disconnects and fuses installed, and voltage verified at dehumidifier and OACC/OAFC				
F3	Pool bonding loop is connected to dehumidifier bonding lug				
F4	Control wires installed and connected between Dehumidifier and OACC/OAFC*				
F5	External interlocks and systems wired to dehumidifier**				

*Other than on packaged dehumidifiers, control wiring must be field installed, and electrical connections made between the dehumidifier and OACC/OAFC prior to the scheduled start up. Interlocks with external head pressure control valve(s) and/or pumps/systems for third party condenser loops must be installed prior to start-up. ** When utilized, all interlocks between the dehumidifier and external systems (BMS, Aux. pool heater, Aux. air heater, lead/lag interlock, etc.) should be installed and wired prior to the scheduled start up.



POOL PRE-START-UP CHECKLIST	
Revision Number	9.0
Last Review Date	September-6-2024

Factory Assisted Start-Up Overview

Dehumidified Air Services (DASV) offers Factory Assisted Start-Up (FASU) in which a DASV service technician or authorized third party will be scheduled onsite to provide guidance and supervision to the qualified installing contractor/start-up agency performing the equipment start-up. Alternatively, DASV may provide remote assistance to the installing contractor or start-up agency under a Remote Assisted Start-up (RASU). All guidance and start-up tasks remain the same whether an in-person Factory Assisted Start-up (FASU) or Remote Assisted Start-up (RASU) is completed. Determination between scheduling of an in person FASU, or remote RASU is at the sole discretion of DASV.

To request scheduling for a Factory Assisted start-up, digitally complete this Pre-Start-up checklist in full, including all schedule request details, then return the digitally completed document in PDF form, along with the related pictures to Scheduling@dehumidifiedairservices.com with as much notice as possible, and not less than 3-weeks prior to the requested start-up date. Every effort will be made to accommodate the requested date(s) however, the available start-up date(s) will depend on the DASV service team's personnel availability and will be at the full and sole discretion of DASV.

Start-up requests especially for replacement equipment installed within an open and operating, existing environment should be scheduled with as much notice as possible before replacement to aid in scheduling availability in a timely manner. It is recommended to submit the pre-start-up checklist 6-8 weeks prior to the requested scheduled start-up date to best ensure scheduling availability for start-up on the requested date(s).

When requesting start-up for multiple units on one site, a separate Pre-Start-up checklist must be completed for each dehumidifier. The serial numbers of all dehumidifiers in which scheduling is requested to be coordinated on for a given site should be indicated within the notes section of each pre-start-up checklist.

The installing contractor/start-up agency is solely responsible for ensuring site and equipment readiness for start-up. Equipment access must be arranged and provided by the installing contractor/start-up agency. The installing contractor/start-up agency is responsible for all tools and materials necessary to complete start-up. Start-up tools and materials required may include refrigerant, glycol, glycol transfer pump, multimeter, psychrometer, manometer, refrigerant handling tools/materials, and standard HVAC service tools. Due to travel requirements, the DASV technician may only have basic hand tools with them during the scheduled factory assisted start-up visit.

Refrigerant must be available during all scheduled start-ups, including packaged equipment. Glycol and a glycol transfer pump must be available onsite for all start-ups on equipment containing fluid loop(s), including packaged equipment. The installing contractor/start-up agency must be onsite for the entire duration of the equipment start-up.

Ensure construction is substantially completed, and all equipment installation tasks are completed prior to the scheduled start-up date. Power to the dehumidifier must be energized at least 24-hours prior to the scheduled start-up date. Pool water must be heated preferably to design temperature, but not less than 75° degrees Fahrenheit prior to the arrival for start-up. The natatorium must preferably be heated to design temperature, but not less than 78° degrees Fahrenheit prior to the scheduled start-up. The dehumidifier should not be used to condition the space during construction, reference the equipment installation, service, and maintenance manuals for additional details.

Pictures should be submitted along with this document indicating the substantial completion of construction and equipment readiness for start-up. Pictures of the dehumidifier should indicate the completion of ductwork, piping, electrical, and overall readiness for start-up. Pictures of the OACC/OAFC should indicate installation of the OACC/OAFC is complete including the connection of all piping and wiring. Pictures of the natatorium should indicate substantial completion of construction, the installation of ductwork, and that the pool is filled.

See the Factory Supervised Start-up Terms and Conditions for additional details.



POOL PRE-START-UP CHECKLIST		
Revision Number	9.0	
Last Review Date	September-6-2024	

*** Factory Supervised Start-Up, Terms and Conditions ***

Read Carefully and Acknowledge the Following

It is the Installing contractor/start-up agency's sole responsibility to perform start-up of the dehumidifier during a factory assisted start-up. The Dehumidified Air Services (DASV) technician's role during an in-person Factory Assisted Start-up (FASU), or Remote Assisted Start-up (RASU) is to provide start-up guidance and supervision to the installing contractor/start-up agency. The installing contractor/start-up agency must have a trained HVAC professional who is properly equipped to complete the start-up, and they must be present on site with the DASV technician for the entire duration of start-up.

All related fields of this pre-start-up checklist must be completed **IN FULL** prior to the scheduling of start-up to ensure the dehumidifier, associated systems, equipment, and the premises are ready for start-up.

Once the start-up schedule is confirmed by DASV, any modifications or cancellations to the schedule within 96 hours (4 business days) of the confirmed site visit date will be charged a modification fee between \$500 and \$2,500 USD per unit. The dollar amount required to sufficiently cover lost travel and administrative expenses, and the applicability of modification charges is at the sole discretion of DASV. Equipment warranties will NOT be registered unless an approved start-up is completed and reported as dictated by the equipment warranty terms. Repairs required due to improper or unauthorized start-ups will not be applicable to warranty. Reference the equipment Warranty Terms found within the equipment submittal for additional warranty details.

Owner training may be arranged to be completed with the DASV service technician during the scheduled start-up period. All personnel requested to be given owner training to by the DASV service technician must be on site during the agreed upon owner training time. Owner training will consist of guidance on best practices and expectations for normal operation and maintenance for the dehumidifier. Owner training does not consist of, nor is it a replacement for, start-up and/or service training. Any additional visits for training purposes, if required, can be arranged, and must be paid for separately.

The installing contractor/start-up agency is solely responsible for ensuring site and equipment readiness prior to start-up. Construction within the natatorium must be substantially complete, and the natatorium cleaned of substantial construction dirt/debris prior to start-up. All doors, windows and walls must be installed, all concrete and drywall work must be complete, all moisture barriers installed, and the pool must be filled, treated, and heated prior to start-up. The natatorium must be in a condition such that the dehumidifier will be able to maintain space conditions without exposure to harsh chemicals, construction dirt/debris, or excessive ventilation, moisture, or thermal load beyond that of design specifications. All natatorium doors and windows must remain closed for the duration of start-up.

The natatorium must be heated to a minimum of 78° degrees Fahrenheit, but preferably to design natatorium conditions +/- 2 degrees Fahrenheit prior to the scheduled start-up date. When the natatorium design temperature is less than 80° degrees Fahrenheit, the natatorium must be heated to the design natatorium temperature +/-2 degrees Fahrenheit. Pool water must be heated preferably to a design temperature but not less than 75° degrees Fahrenheit prior to the scheduled start-up date. When design pool water temperature is less than 75° degrees, Pool water must be heated to design temperature +/-2 degrees Fahrenheit prior to the date of start-up. Failure to obtain and maintain design pool water and natatorium conditions prior to start-up may result in the inability to successfully complete start-up and/or may result in the requirement of further system adjustments after the factory assisted start-up with the equipment operating under design conditions. If a return visit is needed, or if further system adjustments are required due to the pool and/or natatorium not being conditioned within the allowable ranges on the date of start-up, the return visit will be billable.

Power to the dehumidifier must be energized at least 24 hours prior to the equipment start-up. The installing contractor/start-up agency must verify and tighten all electrical connections and verify correct supply voltage prior to energizing power to the dehumidifier. All wiring/piping/interlocking of external systems, including but not limited to, ductwork, electrical, Building Management Systems (BMS/BAS), pool heating system(s), air heating system(s), external ventilation systems, lead/lag system interlock(s), external head pressure control valves, fluid coolers (OAFC), condensers (OACC) and third-party condenser loops must be completed prior to the scheduled start-up date. All fluid loops must be filled and purged of air and all field-installed refrigerant linesets and condensers must be appropriately pressure tested, evacuated and the field charge weighed in prior to the scheduled start-up date.

When applicable, natural gas or propane piping both internal and external to the dehumidifier must be installed and leak checked prior to establishing gas supply to the dehumidifier. Natural gas or propane piping supplying the equipment heater must be purged of air, and design supply



POOL PRE-START-UP CHECKLIST		
Revision Number	9.0	
Last Review Date	September-6-2024	

gas pressure established prior to the scheduled start-up date. When equipped with hydronic heating, the heating loop must be filled and heated to design temperature, and design flow established prior to the scheduled start-up date.

Test and Balance for all air and fluid systems should be completed prior to the scheduled start-up date. Failure to complete Test and Balance on all air and fluid systems prior to the equipment start-up will require additional system adjustments after the completion of Test and Balance. Proper equipment operation cannot be guaranteed when equipment start-up is scheduled and completed prior to the completion of Test and Balance on all air and fluid systems. If a return visit is required after the completion of the Test and Balance for additional system adjustments, the return visit will be billable.

Equipment access including but not limited to security, ladder(s), scaffolding, catwalk, mechanical room access, roof access, etc. must be provided and arranged by the installing contractor/start-up agency. The installing contractor/start-up agency is responsible for all tools and materials necessary to complete start-up. Start-up tools and materials required may include but are not limited to refrigerant, glycol, glycol transfer pump, multimeter, thermometer probes/clamps, psychrometer, manometer, calibrated refrigerant gauges, refrigerant handling tools/materials, and standard HVAC service tools.

Refrigerant must be available during all scheduled start-ups, including packaged equipment. Glycol and a glycol transfer pump must be available onsite for all start-ups on equipment containing fluid loop(s), including packaged equipment. Reimbursement for the quantity of refrigerant and/or glycol added to a packaged/factory sealed circuit only during the factory assisted start-up may be reimbursed at the current warranty rate(s).

At the sole discretion of DASV, if the scheduled Factory Assisted Start-up (FASU) or Remote Assisted Start-up (RASU) cannot be completed due to any reason pertaining to installation and/or site readiness, or installing contractor/start-up agency capability or preparedness, a billable return Factory Assisted Start-up (FASU) visit, or billable Remote Assisted Start-up (RASU) will be required to complete the Factory Assisted Start-up. Payment for the billable repeat Factory Assisted Start-up (FASU) or Remote Assisted Start-up (RASU) attempt must be paid via credit card; Purchase Orders will not be accepted. Dehumidified Air Services will not reimburse equipment self-start efforts by any party.

The DASV service technician is not authorized to perform any work outside of the scope of the factory assisted start-up including physical or visual inspection, maintenance, service repair, and/or troubleshooting that was not previously requested and approved by the master scheduler with prior notice. Such requests must be communicated in advance and a manufacturer service technician will be scheduled to perform the additional work, if approved.

The DASV service technician will not be responsible for generating, reviewing, modifying, and/or approving any report that is not an official Dehumidified Air Services form.

The manufacturer reserves the right for DASV to cancel a factory assisted start-up if a site is deemed unsafe, or if any terms or conditions required for the successful completion of a factory assisted start-up are not met. Evaluation and determination if the terms here within are met are fully and solely at the discretion of Dehumidified Air Services (DASV). In the event a return visit is required, it is the installing contractor/start-up agency's sole responsibility to request and coordinate the scheduling of a return visit.

Dehumidified Air Services will not be responsible for rental equipment, site damages, or cancellation fees required to obtain or maintain design natatorium conditions in preparation for start-up, or in the event of a cancellation or delay of an equipment start-up. The equipment warranty may be void if an approved start-up is not completed, and if the start-up report is not submitted to, and approved by Dehumidified Air Services immediately following the equipment start-up. Reference the equipment warranty terms for additional details pertaining to the equipment warranties.



POOL PRE-START-UP CHECKLIST Revision Number 9.0 Last Review Date September-6-2024

NOTES/COMMENTS		
INSTALLING CONTRACTOR/START-UP AGENCY ACCEPTANCE OF TERMS AND CONDITIONS		
I hereby confirm that the information provided within this document is true and accurate to the best of my knowledge. I hereby declare that I have fully read, understand, and agree to the terms and conditions outlined within this document. I hereby accept full responsibility for all reproductions should the information provided here within be found to be inaccurate, and/or if any terms and conditions are not met before or during the scheduled start up.		

FIRST AND LAST NAME TITLE

SIGNATURE DATE (MM/DD/YYYY)

Dehumidified Air Services Contact information

Phone: 1.833.327.7665

E-mail: Start-up Requests: <u>Scheduling@dehumidifiedairservices.com</u>

General Inquiries: Support@dehumidifiedairservices.com

Parts Requests: Parts@dehumidifiedairservices.com

Warranty Information: <u>Warranty@dehumidifiedairservices.com</u>

For additional information, please visit www.dehumidifiedairservices.com



Dehumidified Air Services is a coast-to-coast service network of local customer support specialists. Backed by the real-time remote monitoring and direct access to the engineers who designed and built your dehumidifier, Dehumidified Air Services is the only organization in North America that has the scale and expertise to deliver trouble-free dehumidification and unparalleled customer service