

QLCI DISPLACEMENT INDUCTION

THE CORNERSTONE OF A WINNING HVAC SYSTEM

4 QLCI

- \bullet Receives 100% outside air from DOAS unit to drive room air induction process across integral coil
- Chilled water and hot water flow modulated to control sensible space loads
- Supply air delivered near floor in displacement mode for:
 - Effective removal of airborne contaminants for better IAO
 - · Low velocity, temperate air for enhanced thermal comfort
 - No moving parts to maintain, produce noise, or consume electricity
- Provides industry leading system efficiency due to displacement ventilation and fluid-based heat transfer



required ventilation needs

• Delivers verifiable outside air for occupants

• Rooftop or indoor mounting

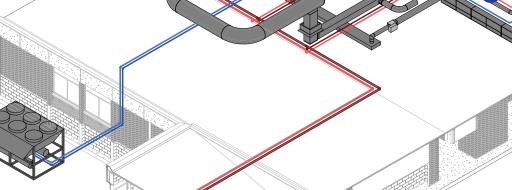
Shown with hot water or chilled water
Packaged DX and gas heat suitable

Geothermal suitable

• Typically energy recovery based

• Desiccant devices suitable

• Isolates rooms so no room-to-room airside cross contamination occurs



2 CHILLER

 Provides chilled water for QLCI and possibly DOAS chilled water coil

- Air-cooled or water-cooled suitable
- If DOAS unit is packaged DX, dedicated elevated chilled water to QLCI offers high efficiency operation
- Alternatives:
 - No Chiller Design Option (only HW available)
 Packaged DX DOAS applied and designed to deliver cool, dehumidified primary air for recognized sensible cooling in space
 - Geothermal water applied Electrification
 - Heat recovery chiller Electrification

v1.2 – Issue Date: 12/2022 © 2022 Carson Solutions. All rights reserved.



- Provides hot water for QLCI zone heating and possibly DOAS hot water coil
- Often high efficiency condensing style boilers applied
- Gas fired or electric boiler suitable
- · Alternatives:
 - If existing steam source available, apply a steam-to-hot water conversion
 - Some climate designs may not require hot water in the zone
 - Geothermal water applied Electrification
 - · Heat Recovery Chiller Electrification