MORRIS Engineering Ltd.

SITE INSTRUCTION NO. ME-08
MECHANICAL AND ELECTRICAL

Project Name: Carleton Place Arena
75 Neelin Street
Carleton Place, Ontario

Project No.: 205

Date: 2020 December 07

MECHANICAL

M8.1 CIR #27 – RTU Orientation:

Proposed orientation of the unit, with short run of supply air duct on the back of the unit, is acceptable.

Mechanical Contractor's claim that "The mechanical design was based on a Carrier RTU and this unit would have the same problem" is incorrect, as the CARRIER unit would not have the clearance issues due to the different orientation of the supply and return air openings in the Roof Curb. Also, offsets could have been made in the roof curb to span the 8" bond beam.

Exterior duct shall be insulated as follows:

.1 All exterior ductwork shall be insulated with a 50mm (2in) layer of fiberglass insulation with protective cover.

.2 Insulation shall be semi-rigid fiberglass insulation, with factory-applied, vapour retarder jacket (Kwikflex or approved equal).

.3 Protective cover shall be pre-fabricated, self-adhering, sheet-type protective membrane, with uv-resistant aluminum weathering surface, over high-density, cross-linked polymer film, and a rubberized asphalt adhesive which sticks directly to the insulation facer (Flexclad or approved equal).

Expected to be no change to the Contract Price.

M. Morris P.Eng.

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CARLETON PLACE ARENA ADDITION AND RENOVATIONS

75 Neelin Street Carleton Place, Ontario

TAL-CO Building Innovations Limited
4728 Bank Street, Suite A
Gloucester, Ontario K1T 3W7
Tel: 613-821-3959
Fax: 613-821-2938

Issue date: Nov. 23, 2020
Revision date: N/A
Revision #: N/A

CIR # 27 Detailed Summary

Questions:

1. Please refer to the attached RFI #4 – RTU Orientation (4 pages) as issued by Climateworks for your review and response.

End of CIR No. 27

ClimateWorks
Heating, Cooling & Plumbing

PO Box 1120
2639 Pollock Rd
Richmond Ontario
K0A 2Z0

WWW.CLIMATEWORKS.CA 613-838-9989 FAX 613-838-4607

REQUEST FOR INFORMATION

DATE:	November 23, 2020
RFI #:	4
CW Job #:	C20-056

Project Name: **Carleton Place Arena**

Project Address: **75 Neelin St.**

In reference to the above contract, we are hereby requesting a clarification, determination and/or information concerning the following:

The alternate Lennox RTU needs 36" of clearance from either end. This will push the supply air discharge into the change rooms. The mechanical design was based on a Carrier RTU and this unit would have the same problem. See attached documents.

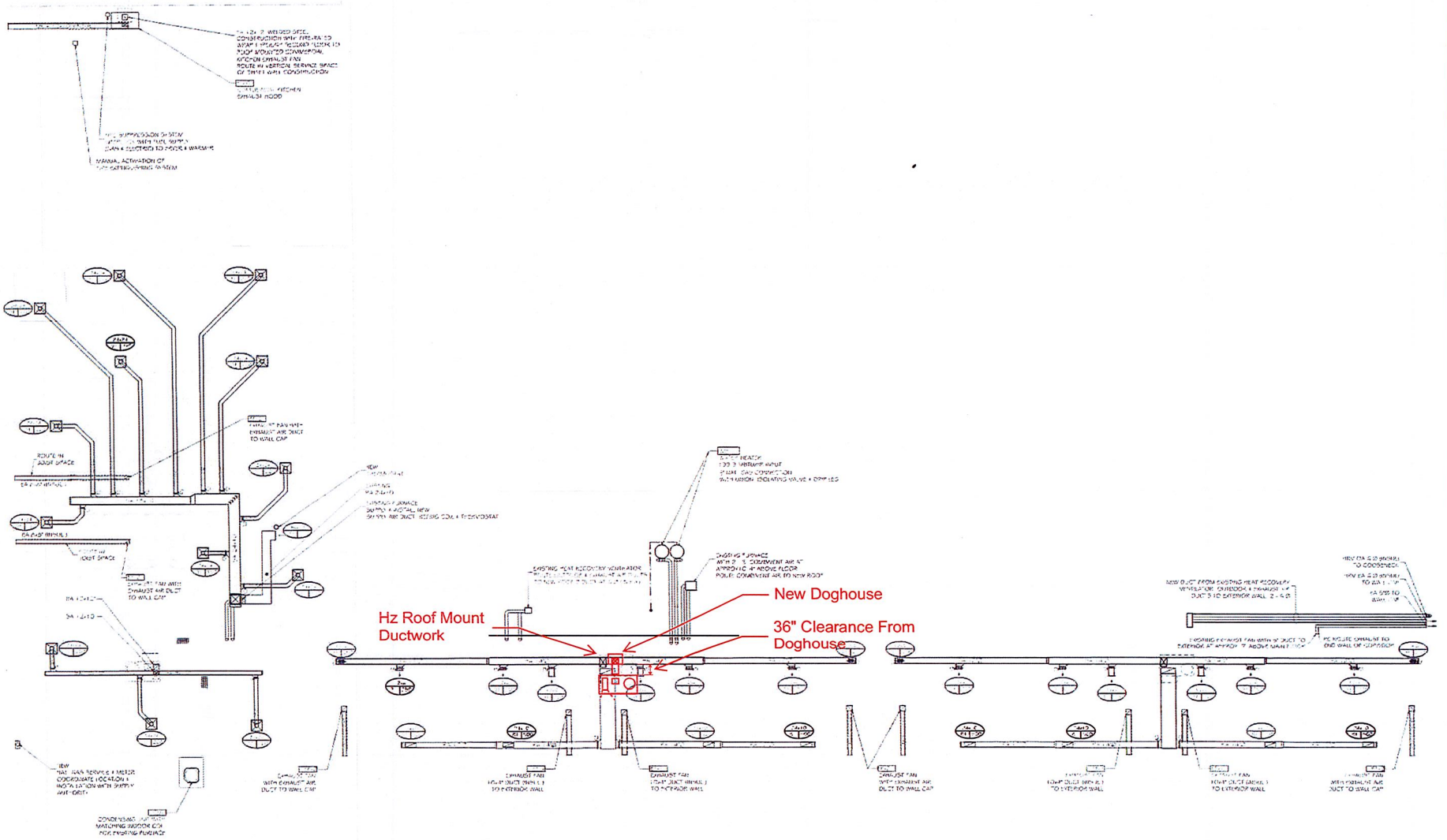
Our proposed solution it to move the unit to respect the proper clearance and side discharge the supply air to bring the drop into the corridor to keep the existing ductwork layout.

Please provide direction.

Thanks,

Craig Calvank,

Project Manager



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MORRIS
Engineering Ltd.

EASTERN
ENGINEERING GROUP INC.
CONSULTING ENGINEERS

RFI#4

CARLETON PLACE
ARENA ADDITION
75 Neelin St,
Carleton Place, Ontario

1	SB	2020-01-31	REVISIONS FOR TENDER
2	SB	2020-02-01	FOR PERMIT
1	SB	2020-02-22	REVISIONS FOR REVIEW
1	SB	2020-02-12	FOR REVIEW
No.	By	Date	Revisions

MECHANICAL
HVAC
PROPOSED GROUND
FLOOR PLAN

	MM
	CB
	MM
	2020-02-16
	9407

M102

Shipping and Packing List

Package 1 of 1 contains:

1- Assembled unit

Check unit for shipping damage. Receiving party should contact last carrier immediately if shipping damage is found.

General

These instructions are intended as a general guide and do not supersede local codes in any way. Authorities having jurisdiction should be consulted before installation.

The KG units are available in three heating inputs. The KC cooling packaged rooftop unit is the same basic design as the KG unit except for the heating section. Optional electric heat is available for KC units. KG and KC units have identical refrigerant circuits with respective 2, 2-1/2, 3, 4, 5 and 6 ton cooling capacities. In addition, KG/KC units are available with 7-1/2 tons of cooling.

Standard and high efficiency units come default with a lightweight, all-aluminum condenser coil. Standard efficiency units are available with an optional, factory-installed fin/tube condenser coil.

Standard efficiency units equipped with fin/tube outdoor coils are available with an optional hot gas reheat coil which provides a dehumidifying mode of operation. Refer to Reheat Operation section.

Availability of units and options varies by brand.

Requirements

See figure 1 for unit clearances.

⚠NOTICE

Roof Damage!
This system contains both refrigerant and oil. Some rubber roofing material may absorb oil, causing the rubber to swell. Bubbles in the rubber roofing material can cause leaks. Protect the roof surface to avoid exposure to refrigerant and oil during service and installation. Failure to follow this notice could result in damage to roof surface.

⚠WARNING

Electric shock hazard and danger of explosion. Can cause injury, death or product or property damage. Turn off gas and electrical power to unit before performing any maintenance or servicing operations on the unit. Follow lighting instructions attached to unit when putting unit back into operation and after service or maintenance.

⚠IMPORTANT

The Clean Air Act of 1990 bans the intentional venting of refrigerant (CFC's and HCFC's) as of July 1, 1992. Approved methods of recovery, recycling or reclaiming must be followed. Fines and/or incarceration may be levied for non-compliance.

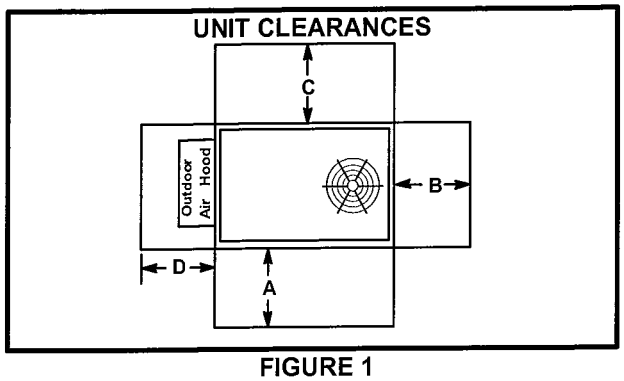

FIGURE 1

[1]Unit Clearance	A in.(mm)	B in.(mm)	C in.(mm)	D in.(mm)	Top Clearance
Service Clearance	48* (1219)	36 (914)	36 (914)	36 (914)	Unobstructed
Clearance to Combustibles	36 (914)	1 (25)	1 (25)	1 (25)	Unobstructed
Minimum Operation Clearance	36 (914)	36 (914)	36 (914)	36 (914)	Unobstructed

*KC 090 unit A dimension is 36" (1219mm).

Note - Entire perimeter of unit base requires support when elevated above mounting surface.

[1] **Service Clearance** - Required for removal of serviceable parts.
Clearance to Combustibles - Required clearance to combustible material (gas units).
Minimum Operation Clearance - Required clearance for proper unit operation.

Use of this unit as a construction heater or air conditioner is not recommended during any phase of construction. Very low return air temperatures, harmful vapors and operation of the unit with clogged or misplaced filters will damage the unit.

If this unit has been used for heating or cooling of buildings or structures under construction, the following conditions must be met or the warranty will be void:

- A room thermostat must control the unit. The use of fixed jumpers that will provide continuous heating or cooling is not allowed.
- A pre-filter must be installed at the entry to the return air duct.
- The return air duct must be provided and sealed to the unit.
- Return air temperature range between 55°F (13°C) and 80°F (27°C) must be maintained.
- Air filters must be replaced and pre-filters must be removed upon construction completion.

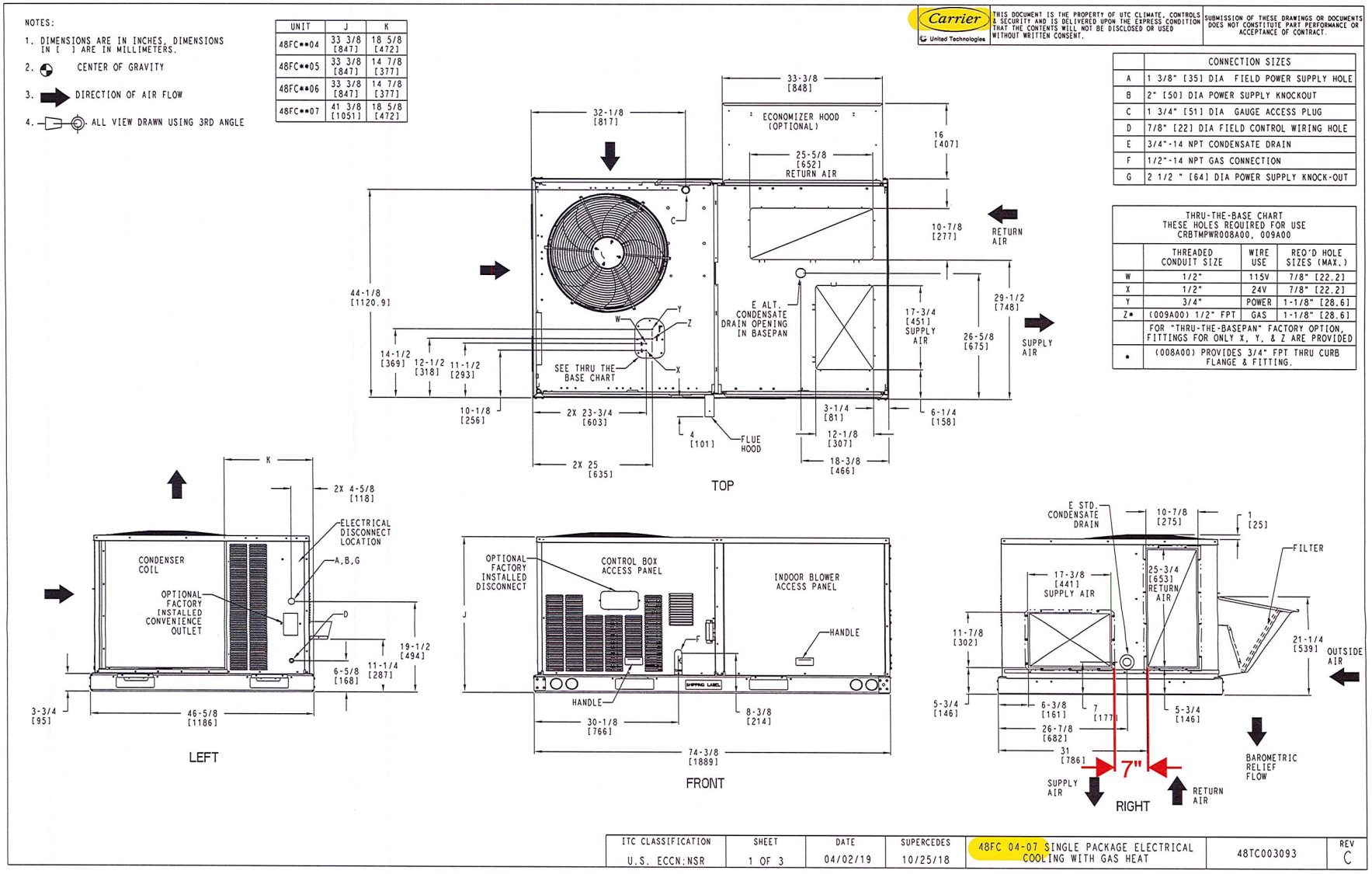

Fig. 2 — Unit Dimensional Drawing