

G. Configuration:

1. 2'x4' Terminal Unit shall consist of one discharge grille and one return grille with removable core integrated into one combined grille that is designed to fit into a standard (2'x4') T-Bar ceiling grid. The return grille portion shall be egg crate style and allow cleaning of the lint screen with a vacuum through the grille. Supply air (a mix of primary and conditioned room air) is distributed in one direction across the ceiling line. Return air is returned through a grille adjacent to the supply air louvers. A single duct connection and 1/2" supply and return water connection for each unit with vent cock will be provided.
2. 4'x4' Terminal Unit shall consist of a minimum of two discharge grilles and one return grille with removable core integrated into one combined grille that is designed to fit into a standard T-Bar ceiling grid. The return grille portion shall be egg crate style and allow cleaning of the lint screen with a vacuum through the grille. Supply air (a mix of primary and conditioned room air) is distributed in opposite direction across the ceiling line. Return air is returned through a grille adjacent to the supply air louvers. A single duct connection and 1/2" supply and return water connection for each coil with vent cock will be provided. The water piping will be pre-piped to a single 3/4" supply and return connection for the hydronic piping assembly.

H. Acoustic Performance:

1. The acoustical performance of the Air Terminal Unit shall be equal to or better than the following Sound Power Level (re 10<sup>-12</sup> Watt):

2'x4' Unit:

Octave Band, Hz	125	250	500	1000	2000	4000	8000
Outlet at the grille -LW	48	42	42	40	35	29	30

4'x4' Unit:

Octave Band, Hz	125	250	500	1000	2000	4000	8000
Outlet at the grille -LW	45	39	39	37	32	26	27

2. All terminal units shall maintain NC32 or less operating at design parameters within classrooms.

I. Casing Leakage:

1. Casing leaking shall not exceed 2% of design primary airflow at 2" water gauge. Field leakage testing shall be an option for the owner. Manufacturer is to provide a temporary blank-off or form of sealing the unit for field testing as required. If the unit(s) are found to fail leakage testing than the manufacturer shall be liable for further testing of all units and any project delays.

J. Filters:

1. Cleanable woven aluminum lint screens. Provide one set in units and a second complete set.

K. Approved Manufacturers:

1. NuClimate
2. M&I
3. Prior approval on submittals of other manufacturers (such as MAFNA, DADANCO and Trox) must include capacity and dimensioning information for evaluation prior to approval. Dimensioning data shall include information to substitute for the double unit assemblies. Also include sound criteria, and induction ratios, etc.

**PART 3 EXECUTION**

**3.01 GENERAL**

- A. Physical size and noise criteria will be strictly enforced. Approved manufacturers are listed for quality only, not for noise and size. It is up to the equipment supplier to provide equal VAV boxes to those listed on the schedule.

**END OF SECTION**