

Quality Air Distribution Inc. Air & Hydronic Balancing

476 Oakwood Drive. Pickering, Ontario. L1W 2M7. Tel.(905) 492-3111 www.qualityairdistribution.com



Certified Member of the National Building Comfort Testing Association (NBCTA)

Reg. No. 003-52

Test and Air/Hydronic Balance Analysis

Project name: PAUL LEWIS Therapeutic Services.

Project Address: 831 North Service Road. Mississauga, Ontario.

Owner: PAUL LEWIS

Architect:

Engineer:

Our Job No. 21032896

Issued: 03/06/2021

General:

Mechanical:

Sheet Metal:

Control:

Testing Personnel: D. Niezgoda P.Eng.

Reported by: D. Niezgoda P.Eng.

The results, herein listed in this report, were tested in accordance with the latest NBCTA requirements for this trade

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Friday, March 05, 2021.

Project Name: PAUL LEWIS Therapeutic Services.

Project Address: 831 North Service Road. Mississauga, Ontario.

On Friday, March 05, 2021 I conducted test and adjustment for Energy Recovery Ventilators Servicing Treatment Rooms and Public Waiting Area of above-mentioned facility.

The purpose of this test and adjustments was achievement of negative pressure in the Treatment Rooms, positive pressure in the Common space (waiting area) and calculation of air changes (ACH) in the serviced areas.

Treatment Rooms and Common space are served by four Energy Recovery Ventilation Units, equipped with speed controllers allowing to control speed of air supply and exhaust fans separately.

All ERV terminals in the Treatment Rooms have their Exhaust Fans speed set to HI, Supply Fans only 70 percent of their nominal speed.

Energy Recovery Ventilator Unit Servicing Common area is setup reversely, Supply Fan HI speed and Exhaust Fan 70 percent of its nominal speed.

As a result, tested pressure in Treatment Rooms with reference to Common space is as follow:

- Treatment Room № 1: -0.007" WC
- Treatment Room № 2: -0.003" WC
- Treatment Room № 3: -0.004" WC

DISCLAIMER:

This document has no meaning to override or substitute for an Existing Regulations /Guide Lines governing HVAC equipment installation and its adjustment for Medical Industry.





Air Changes per Hour (ACH) test sheet

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System Independent Energy Recover Ventilation Units

Room No Name	Rm. dimensions L x W x H (FT)			Rm. Vol. (CFT)	Required ACH-total	Required O.A. ACH	Outlet / Intake No	Outlet/Intake Type	Required CFM	Actual CFM	Calc. ACH	Outside ACH
Therapy 1	10	9.5	8	760.0	--	--	Exhaust	opening	--	126	9.9	--
Therapy 2	15	9.5	8	1140.0	--	--	Exhaust	opening	--	188	9.9	--
Therapy 3	13.3	10.3	8	1095.9	--	--	Exhaust	opening	--	159	8.7	--

NOTES: Air Change per Hour Calculation: ACH= CFM x 60 / Room Volume
To calculate time (minutes) for airborne contaminant removal: 414.5 /ACH (in minutes)

