

## Bukovy Dental

Location: **Thunder Bay, ON**

Contractor: **Keating Inc.**

Price Representative: **E.H. Price – Thunder Bay**

Many dental procedures generate aerosols, which can increase the risk of exposure to airborne pathogens.

To reduce the risk of exposure to airborne pathogens, provincial guidelines suggested that dental operatories in which aerosol-generating procedures take place allow “fallow time” between procedures. Fallow time allows the operatory to be cleared of aerosols between patients and is determined by the number of air changes per hour (ACH) in the space and the time required to achieve 99.9% removal of airborne contaminants. Most dental offices have only 2-4 ACH, which requires 207-104 minutes of fallow time, significantly reducing the number of patients that a dentist could treat each day.<sup>1</sup>

In order to reduce the number of airborne pathogens in the space, Dual-Outlet Reverse Flow Fan Filter Units (PURAFLU) from Price were installed in Dr. Bukovy’s dental clinic\*. Dual-Outlet Reverse Flow Purafluo units draw air through the perforated face, pass it through a HEPA filter to remove 99.9% of pathogens\* and other particulates\*, and then discharge the air through a dual outlet so that a portion of the airflow may be exhausted outdoors while the remainder is recirculated within the space. Recirculation within the space increases the number of air changes to reduce the concentration of airborne contaminants, and eliminates the need for additional makeup air, and therefore a larger air-handler in retrofit applications.

*“The speed of response in developing the Purafluo allowed dental offices to respond quickly, begin serving patients and get back on their feet.” – Tony Baldassi, E.H. Price Thunder Bay*

Bukovy Dental is located in a renovated home, which meant that installation of industrial equipment could have been difficult, but the Mounting Frame (HGMF), allowed for seamless installation in the sheetrock ceiling.

*“I’m excited about this product. It’s like a one-stop-shop with ease of installation and directions that are involved. It’s really simple to install.” – Rob Turner, Keating Inc.*

The Dual-Outlet Reverse Flow Purafluo was the perfect product to upgrade Bukovy Dental for improved indoor air quality. This solution resulted in an increase from 4 ACH to over 40 ACH, in the clinic room, which decreased fallow time to just 10 minutes (less than the time required to physically clean the space between patients). This will allow Dr. Bukovy to prioritize staff and patient well-being and, run his clinic efficiently without major upgrades to the HVAC system.

*“The result was fantastic, and the patients and staff both feel safe.” – Dr. Brian Bukovy, Bukovy Dental*

<sup>1</sup> <https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb>

\* Removal of 99.9% of airborne Phi-X174 (virus), A. niger (mold), and P. tritimum (fungus) was demonstrated by third-party laboratory within 30 minutes when Purafluo was operated at minimum air flow setting (254 CFM), or within 15 minutes if operated at maximum airflow setting (750 CFM), in a 10’x10’x10’ room at ambient temperature and humidity.

