Chart 2 shows the relationship of maximum outlet air temperature obtained vs inlet air velocity at several sheath wsi levels.

This chart can be used for either steel or stainless steel finned elements operating at a maximum of 750°F and provides a way of establishing either airflow required or outlet temperature that will be obtained when sheath wsi is known for an application.

These curves show that to obtain a higher air outlet temperature at a constant FPM, the sheath wsi must be reduced to keep the element within the 750°F temperature limit of sheath & fin materials. These curves are for air entering a heater at or near ambient (60°-105°F).