Hot Face vs. Cold Face Temperature

3M™ Nextel™ Woven Fabrics 312 & 440

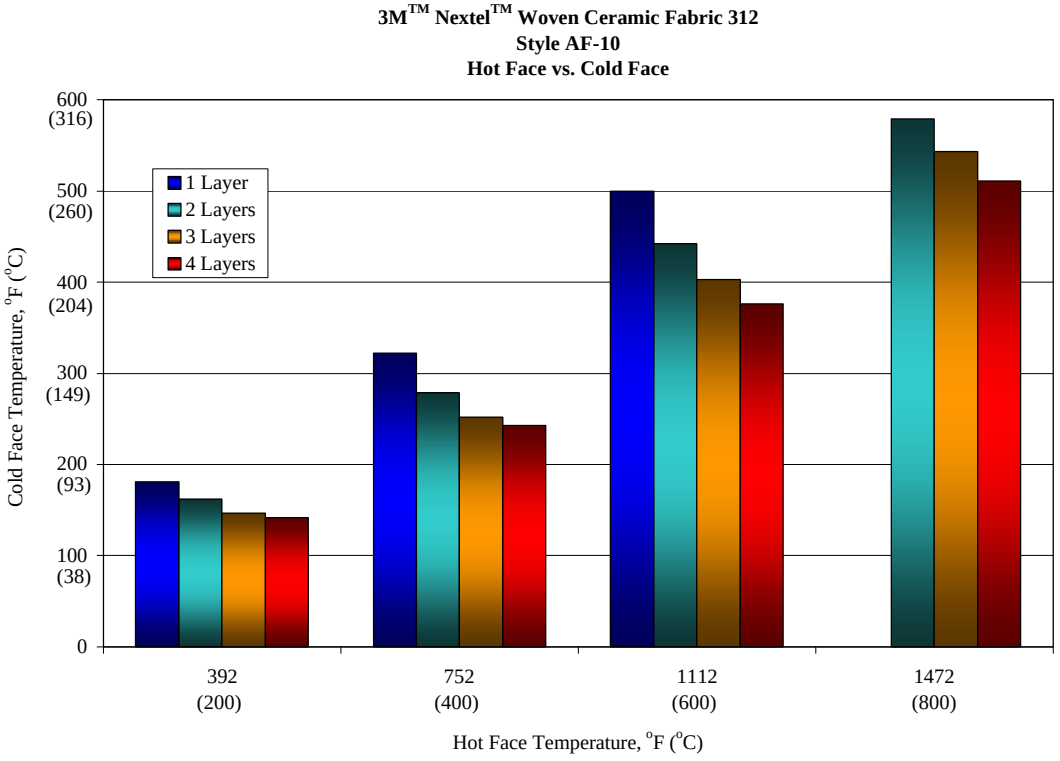
Hot face versus cold face temperature tests were conducted on samples of one through four layers of heat cleaned 3M Nextel Ceramic Fabrics 312 and 440.

The heat source was a small lab furnace capable of reaching a temperature of 1832°F (1000°C).

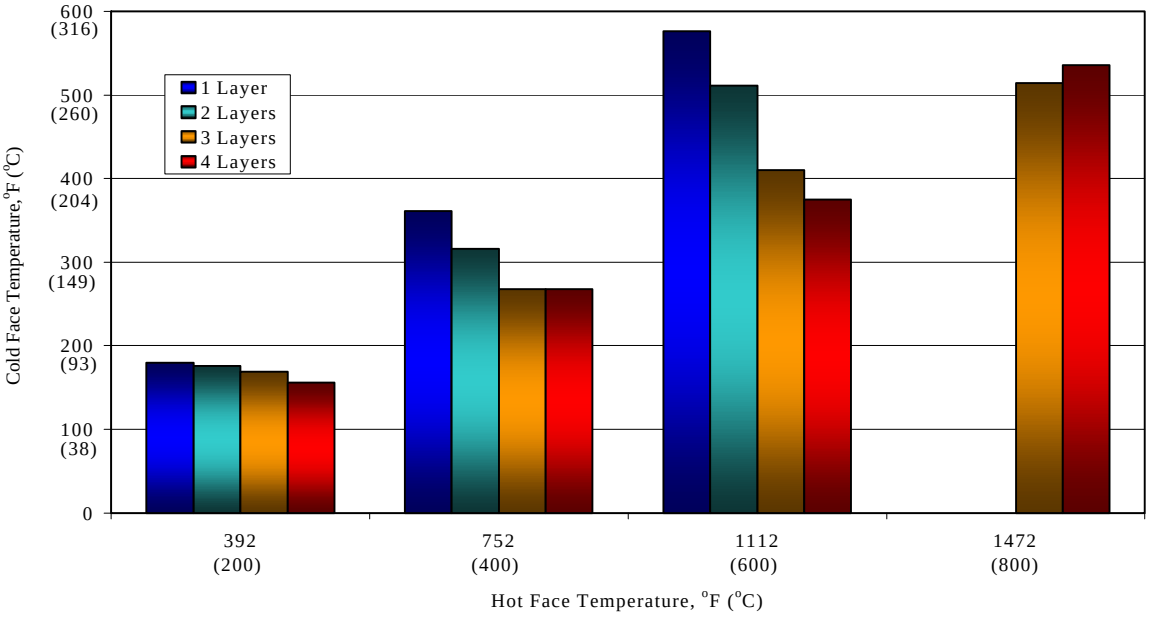
A 4 inch x 6 inch (10,16 cm x 15,24 cm) rectangular hole was cut in the top of the furnace. Fabric was cut so that the edges overlapped the opening. A thermocouple was placed in the furnace for the measurement of the hot face temperature. The cold face thermocouple was placed lightly on the top of the fabric.

Temperature was recorded after the cold face temperature had reached a steady state.

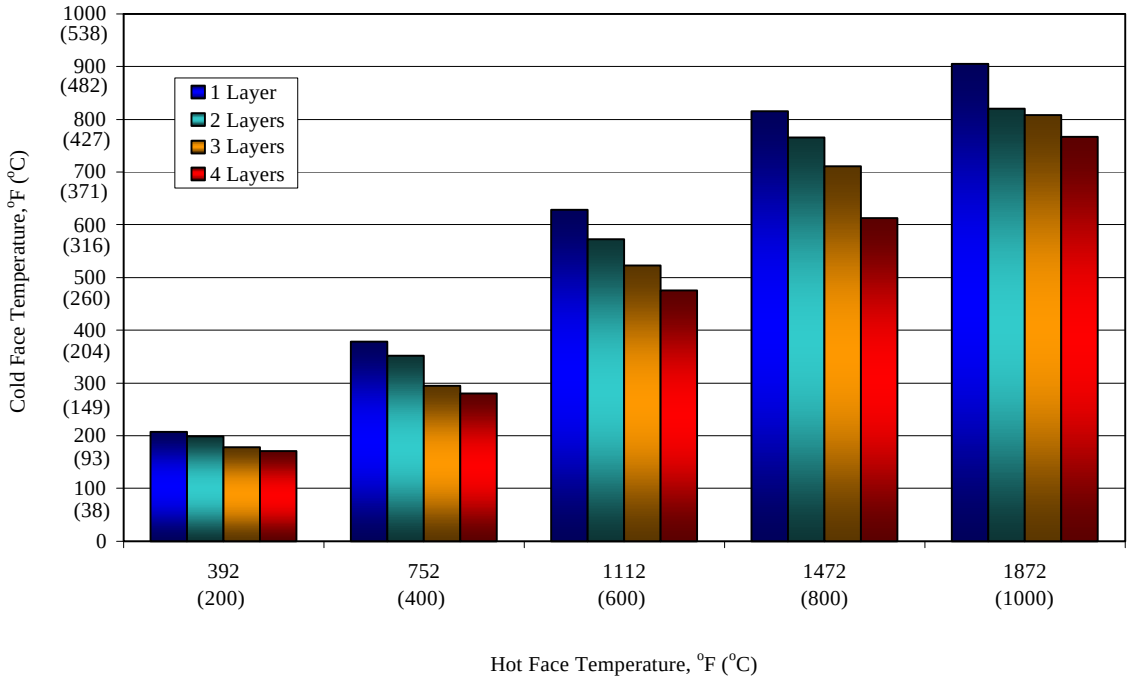
Results of the test are found in the following graphs:



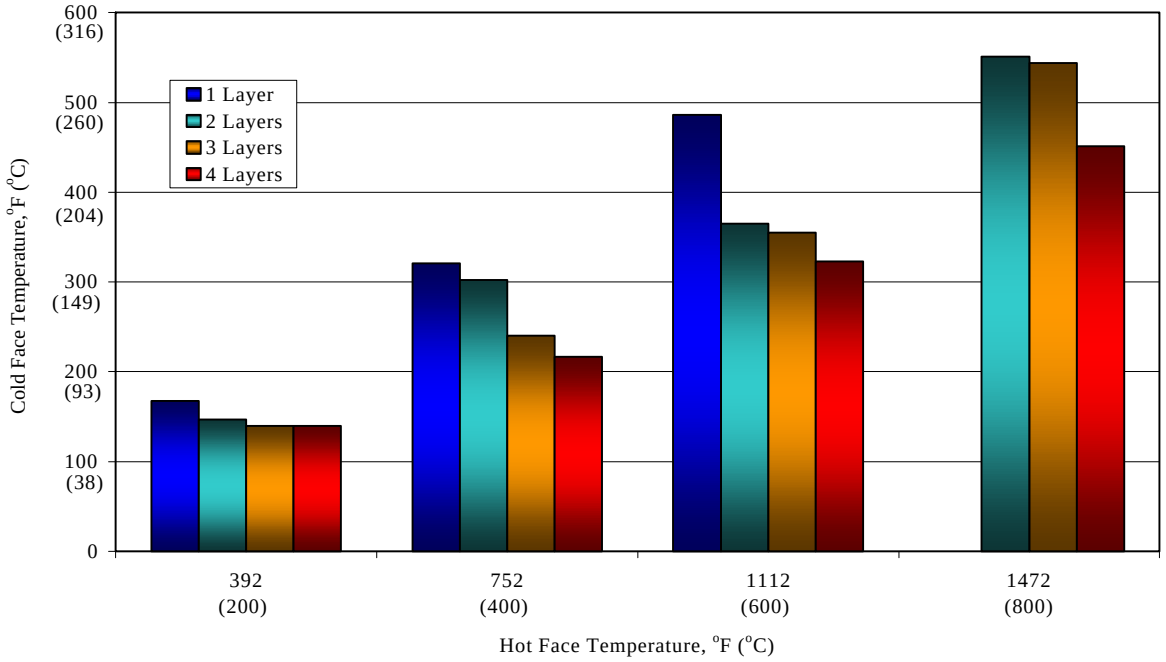
3M™ Nextel™ Woven Ceramic Fabric 312
Style AF-11
Hot Face vs. Cold Face



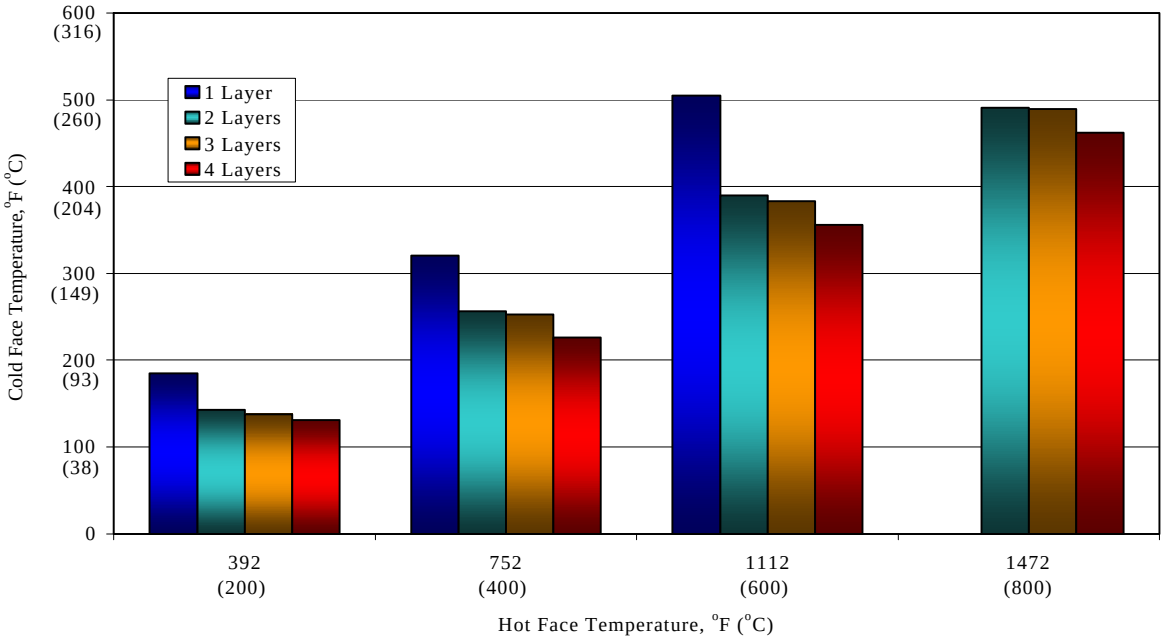
3M™ Nextel™ Woven Ceramic Fabric 312
Style AF-14
Hot Face vs. Cold Face



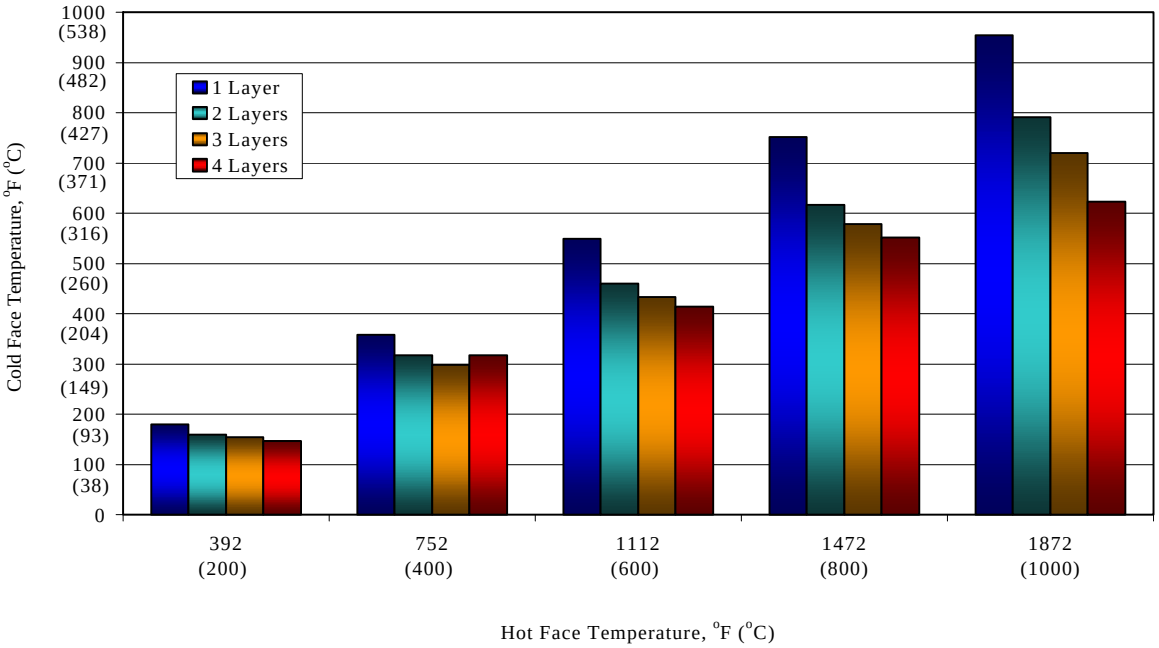
3M™ Nextel™ Woven Ceramic Fabric 312
Style AF-20
Hot Face vs. Cold Face



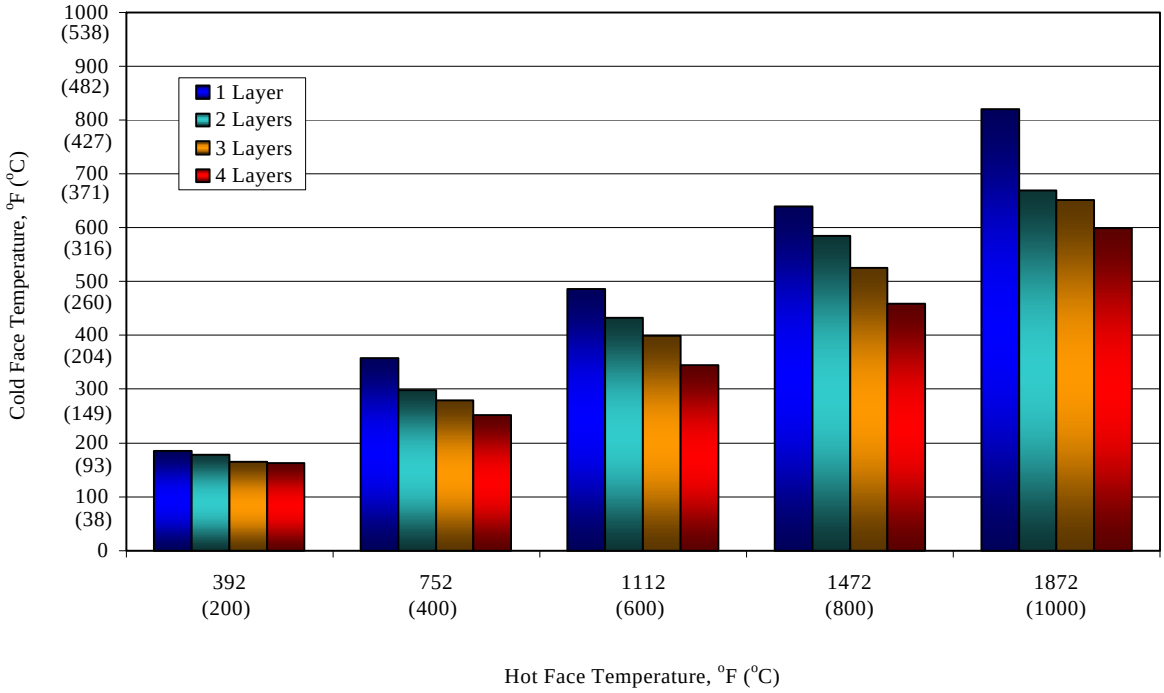
3M™ Nextel™ Woven Ceramic Fabric 312
Style AF-30
Hot Face vs. Cold Face



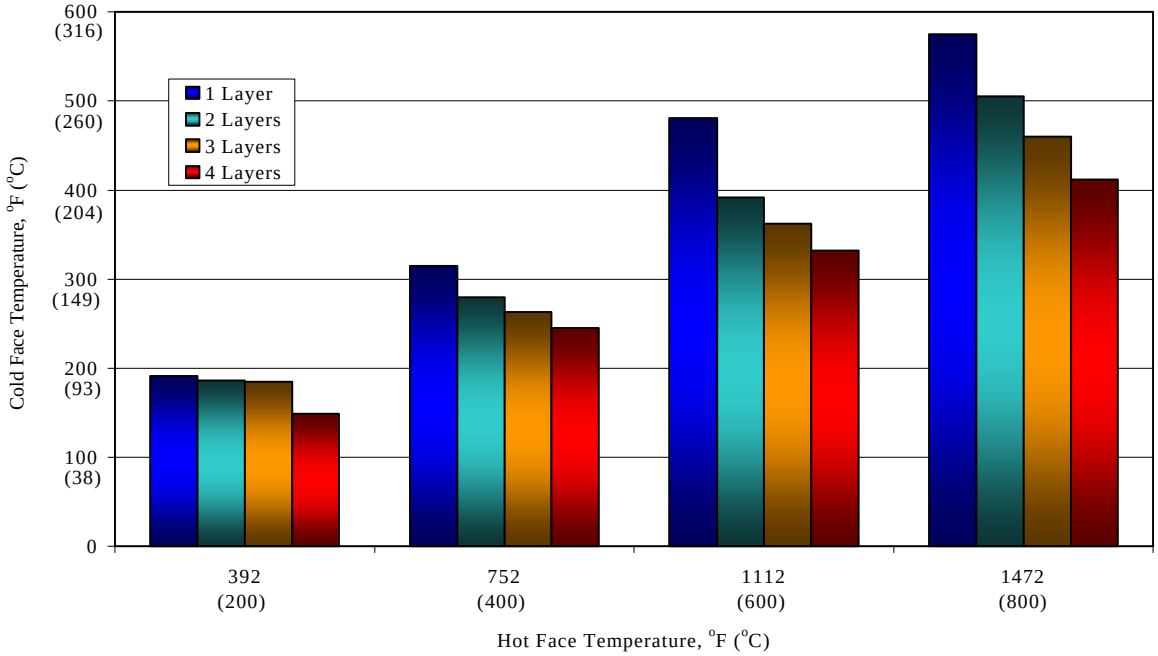
3M™ Nextel™ Woven Ceramic Fabric 312
Style AF-40
Hot Face vs. Cold Face



3M™ Nextel™ Woven Ceramic Fabric 312
Style AF-62
Hot Face vs. Cold Face



3M™ Nextel™ Woven Ceramic Fabric 440
Style BF-20
Hot Face vs. Cold Face



3M™ Nextel™ Woven Ceramic Fabric 440
Style BF-30
Hot Face vs. Cold Face