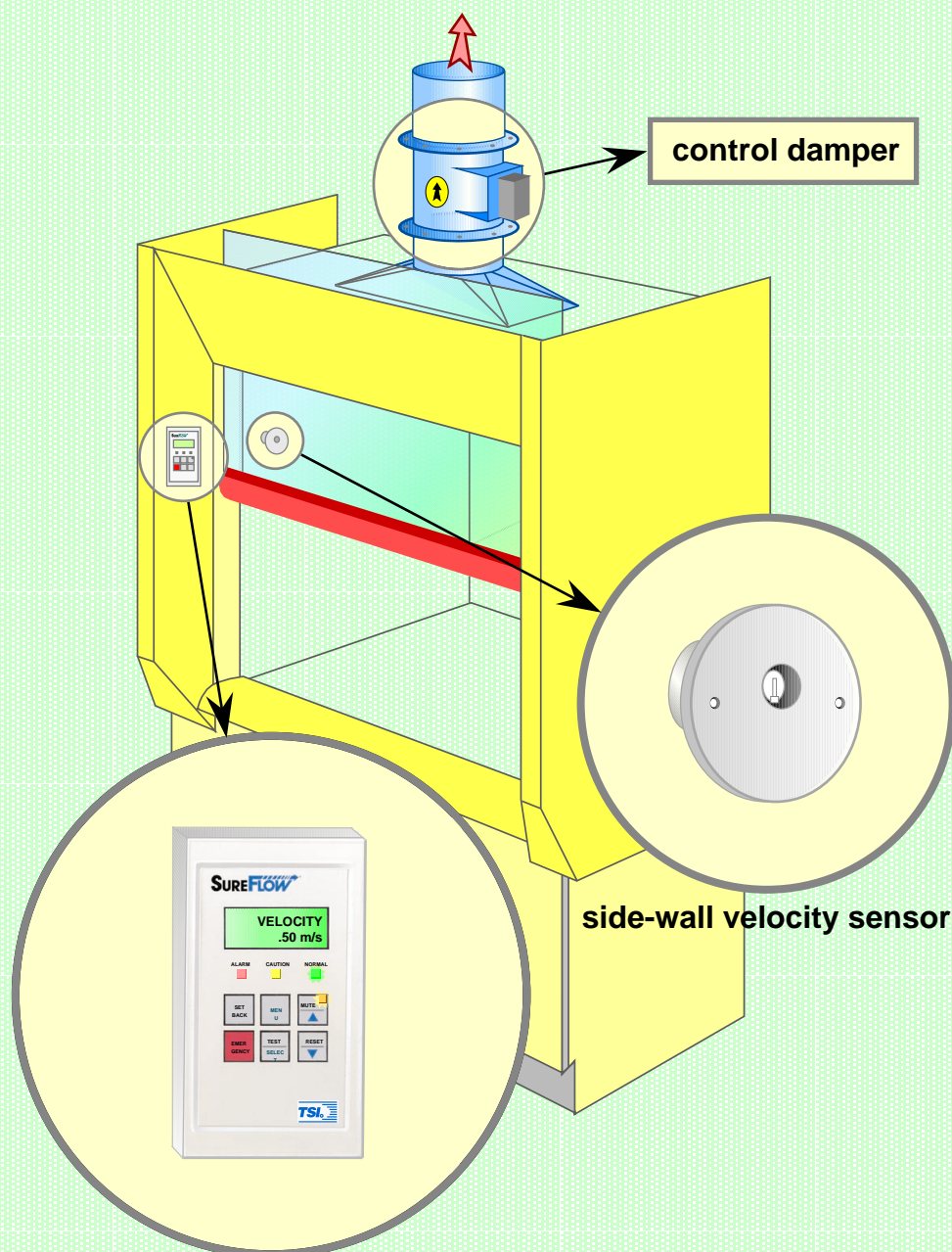


SUREFLOW[®]

fume cupboard control solution

face velocity control



Fume cupboard extract flow is regulated by the 8650 SureFlow face velocity controller as shown in the figure. The face velocity control system typically consists of the following main components:

- (a) digital control panel with built-in velocity display and alarms
- (b) side-wall velocity sensor
- (c) control damper/actuator

Fume cupboard face velocity is measured by the velocity sensor and its signal input to the 8650 controller. The 8650 controller compares the measured velocity with a set-point value and subsequently outputs a control signal to the actuator to adjust the extract damper to maintain the face velocity at the set-point value. The extract volume flow is thus reduced for smaller openings and increased for larger ones. The 8650 controller comes with programmable low and high velocity alarm set-points. Whenever the face velocity falls outside the alarm set-points, both visual and audible alarms come on to alert the user. In addition, a sash-high switch is used to alarm whenever the sash is opened above the normal sash opening.