Common Types of Biosafety Cabinets

Horizontal Flow “Clean Bench”
NOT A BIOSAFETY CABINET!
Offers NO worker protection
A. front opening
B. supply grille
C. supply HEPA filter
D. supply plenum
E. blower
F. grille

Class I BSC
A. front opening
B. sash
C. exhaust HEPA
D. exhaust plenum
Class II Type A BSC
A. front opening
B. sash
C. exhaust HEPA filter
D. rear plenum
E. supply HEPA filter
F. blower

Class II Type B3
BS C
(Tabletop model)
A. front opening
B. sash
C. exhaust HEPA filter
D. supply HEPA filter
E. positive pressure plenum
F. negative pressure plenum
Class II Type B1 BSC
A. front opening
B. sash
C. exhaust HEPA filter
D. supply HEPA filter

E. negative pressure exhaust plenum
F. blower
G. additional HEPA filter for air supply

Class II Type B2 BSC
A. front opening
B. sash
C. exhaust HEPA filter
D. supply HEPA filter
E. negative pressure exhaust plenum
F. supply blower
G. filter screen
Class III BSC (Glove Box)

A. glove ports with O-ring for attaching arm-length gloves to cabinet
B. sash
C. exhaust HEPA filter
D. supply HEPA filter
E. double-ended autoclave or pass-through box

Note: A chemical dunk tank may be installed which would be located beneath the work surface of the BSC with access from above. The cabinet exhaust needs to be connected to the building exhaust system.