

Biosafety Cabinet (BSC) Placement Requirements for new Buildings and Renovations

NATIONAL INSTITUTES of HEALTH

**Division of Technical Resources
Office of Research Facilities**

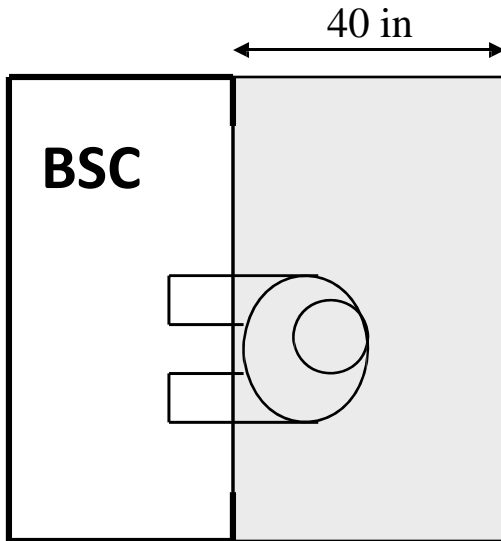
Reference:

Microbiological Safety Cabinets: Recommendations for Cabinet Installation. British Standards Institution, BS 5726:2005.
Methodology for Optimization of Laboratory Hood Containment. Memarzadeh, F. National Institutes of Health, 1996.

DO's

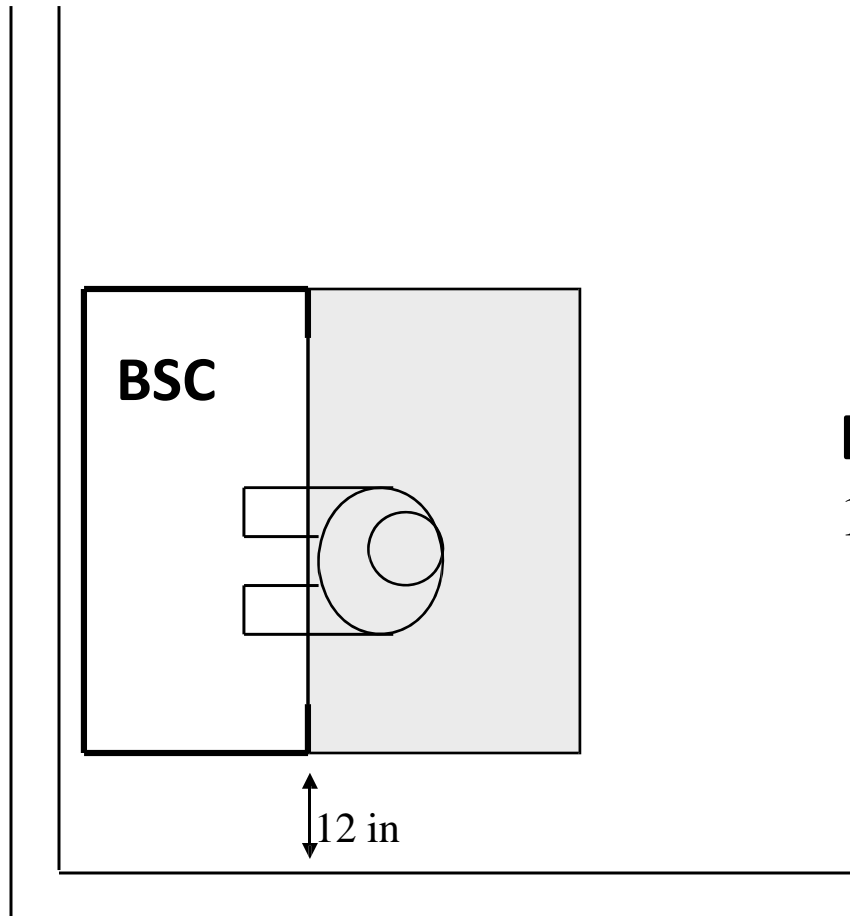
Requirements for BSC Placement

Workspace Specifications



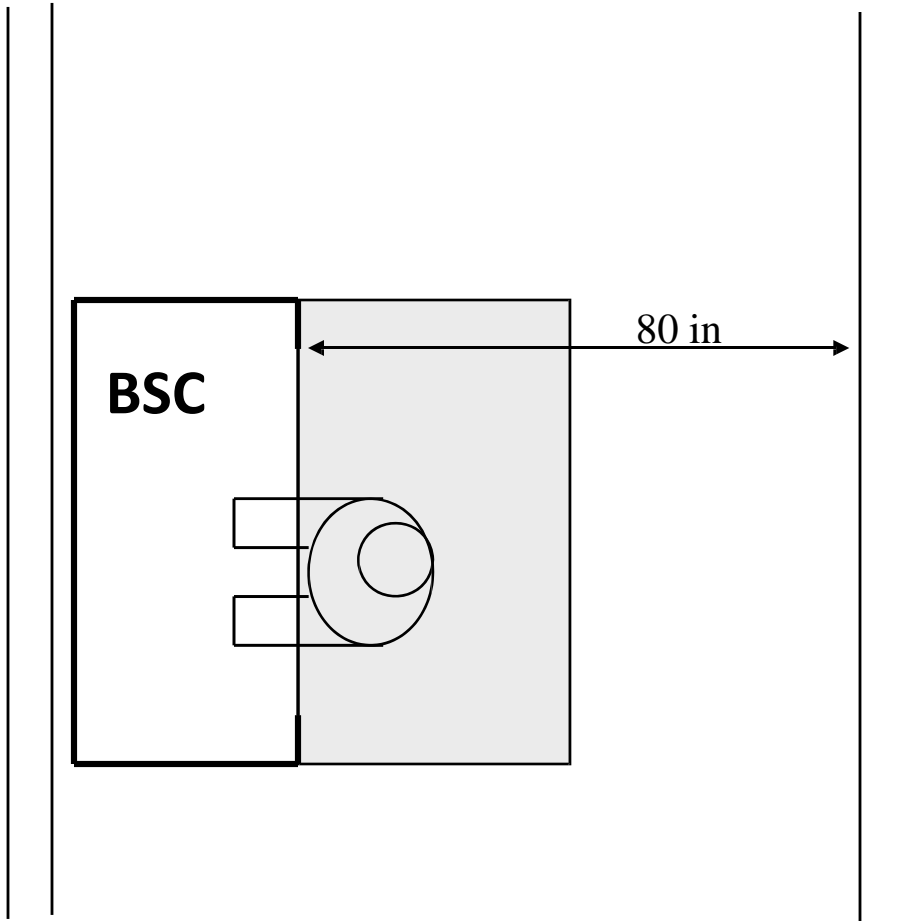
DO Maintain an undisturbed space of 40" around BSC.

Distance to Adjacent Wall



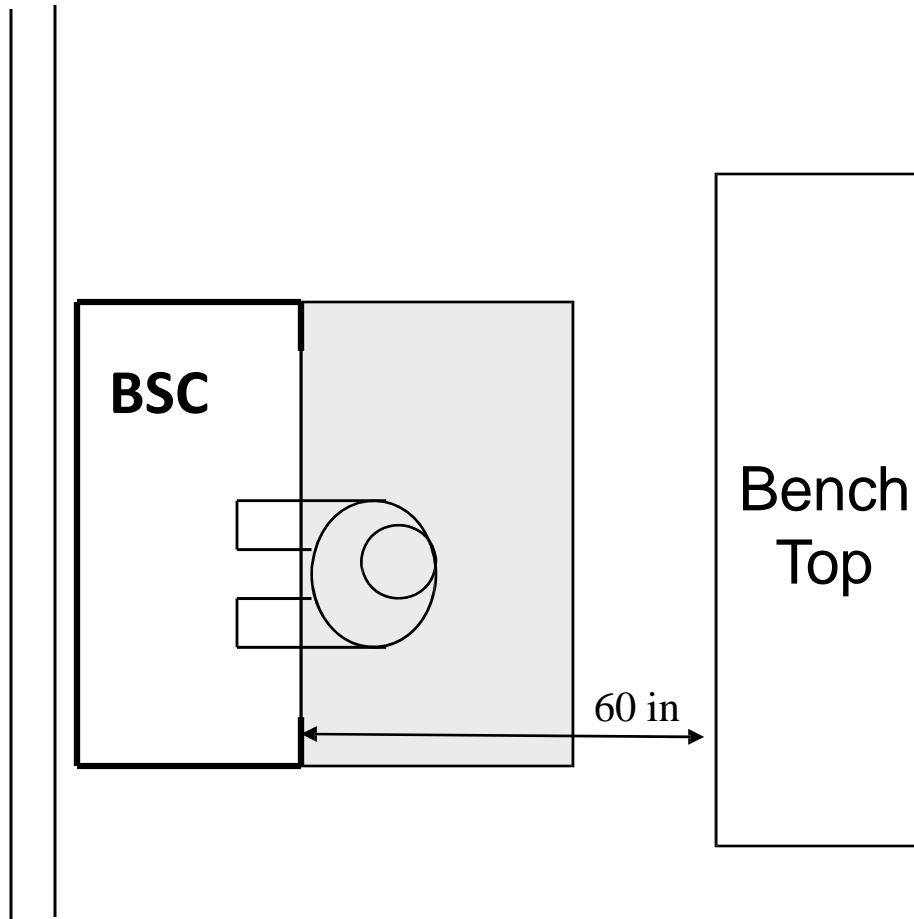
DO Maintain a distance of 12" to adjacent walls.

Distance to Opposing Walls



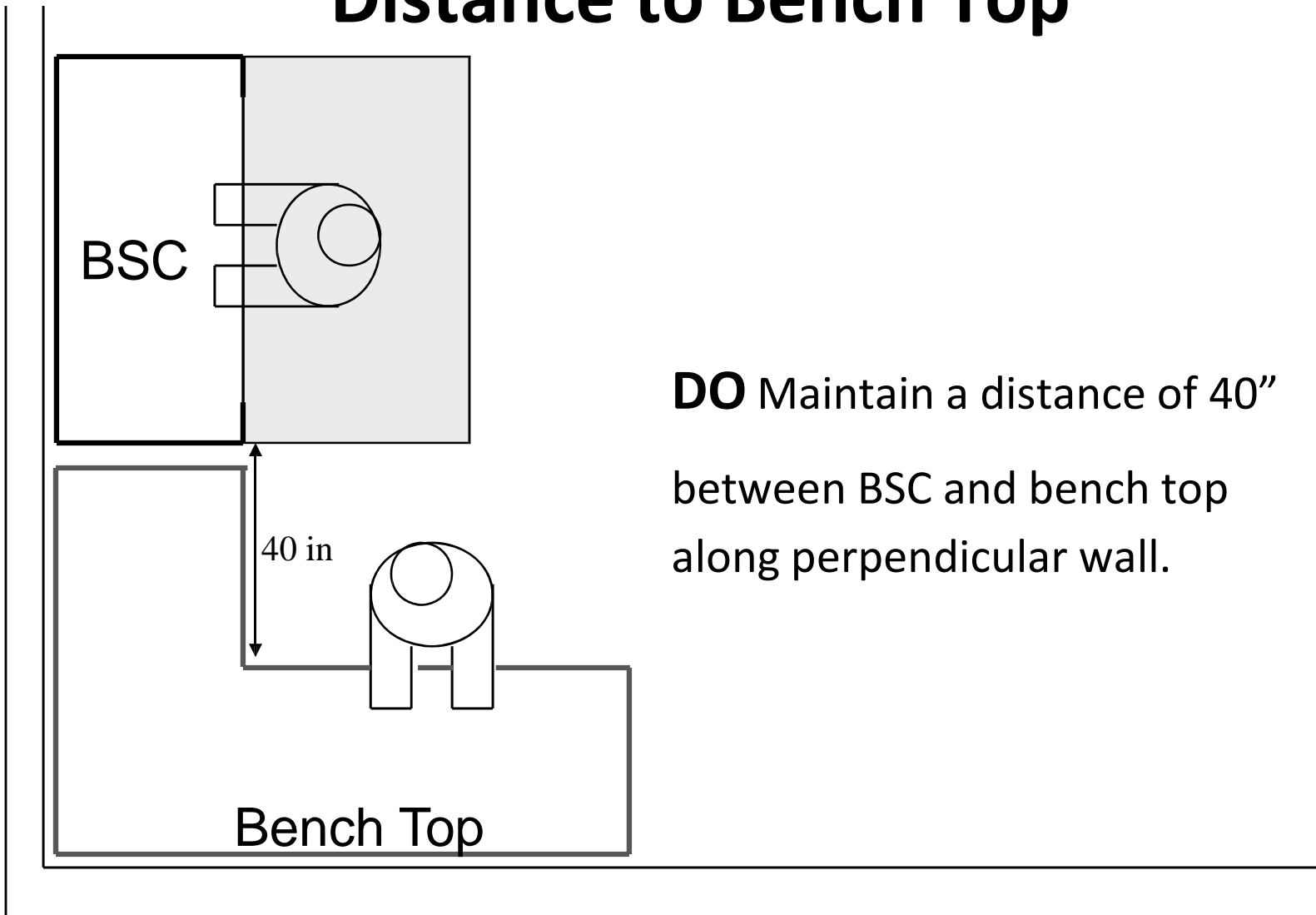
DO Place BSCs at least
80" from opposing walls.

Distance to Bench Top



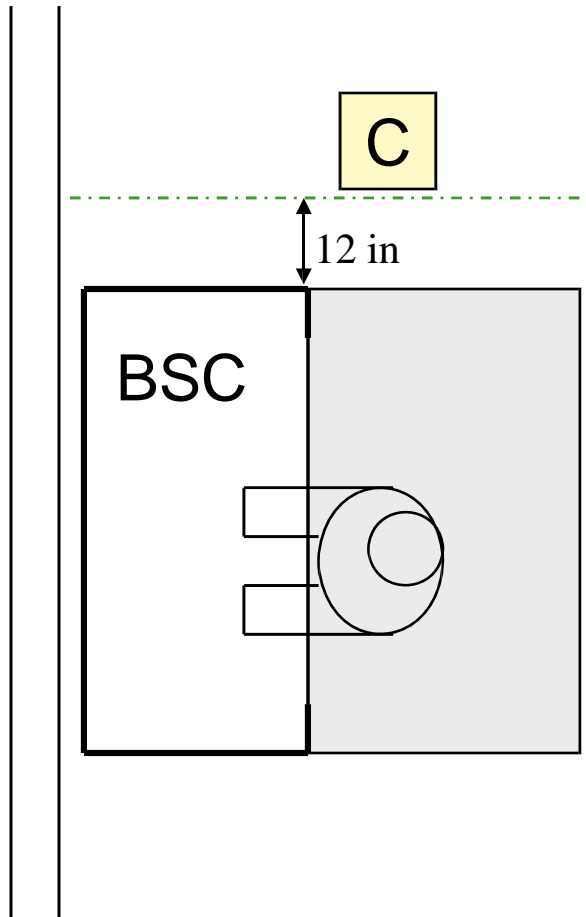
DO Place BSCs at least 60" to opposing bench tops or areas with occasional traffic.

Distance to Bench Top



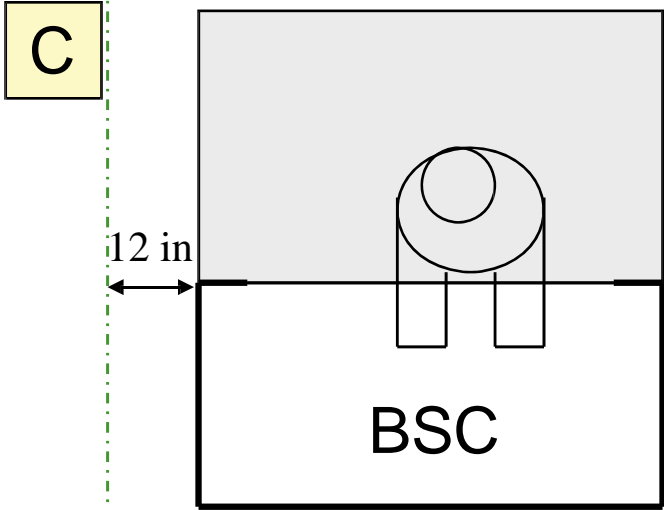
DO Maintain a distance of 40”
between BSC and bench top
along perpendicular wall.

Distance to Columns



DO Maintain a distance of 12" to columns to avoid disturbance to BSC airflow.

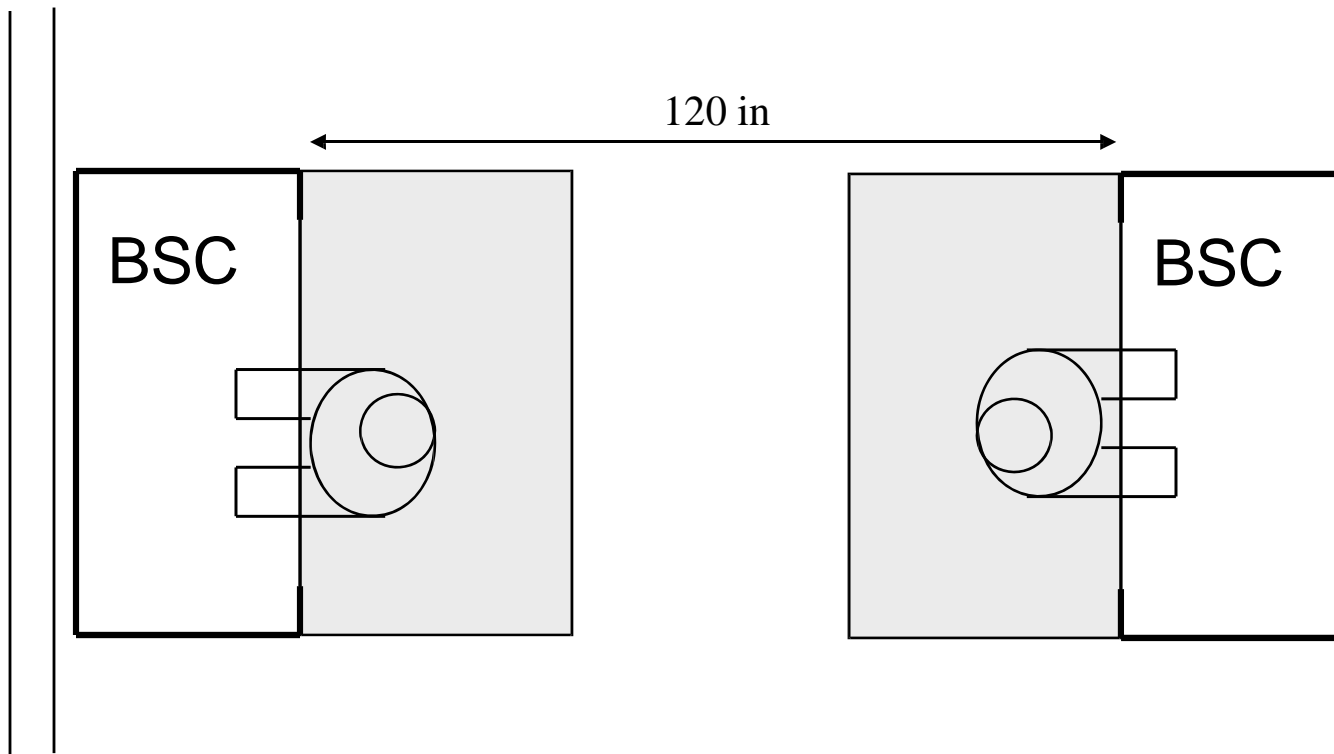
Distance to Columns



NOTE: Columns at a distance of 12” can aid in defining traffic routes.

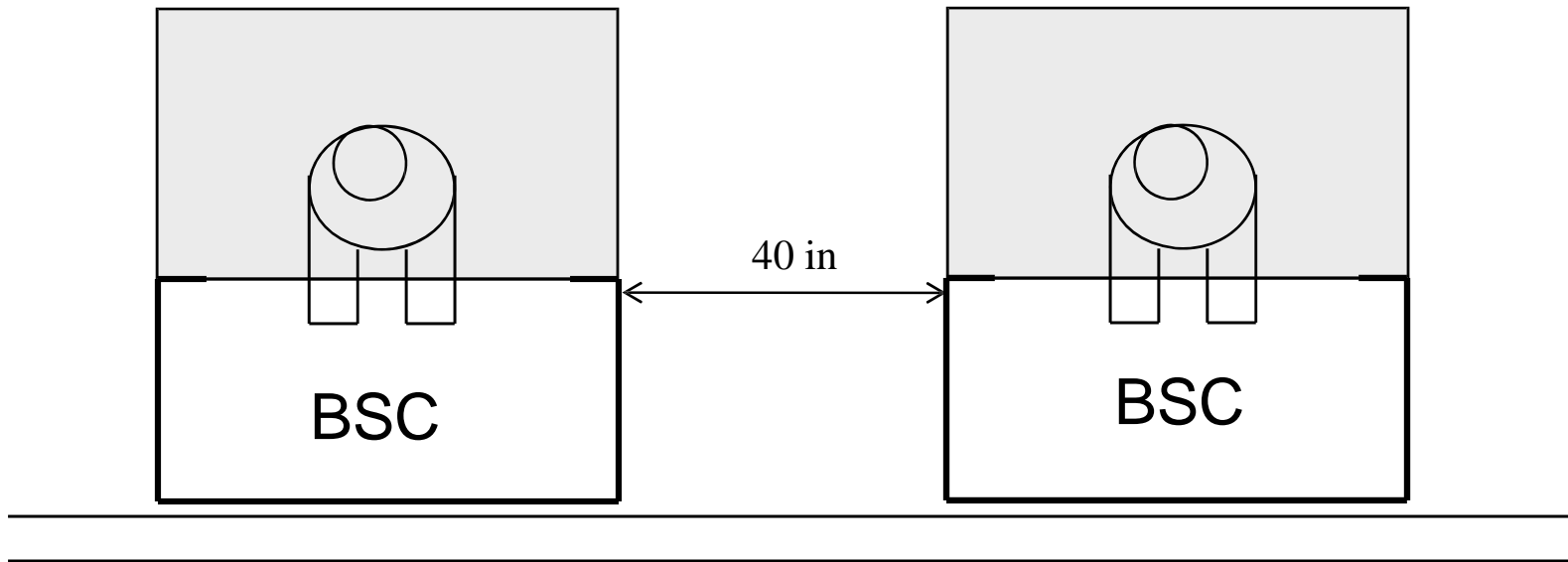
BSC Placement Along Opposing Walls

DO Maintain a distance of 120" between opposing BSCs.



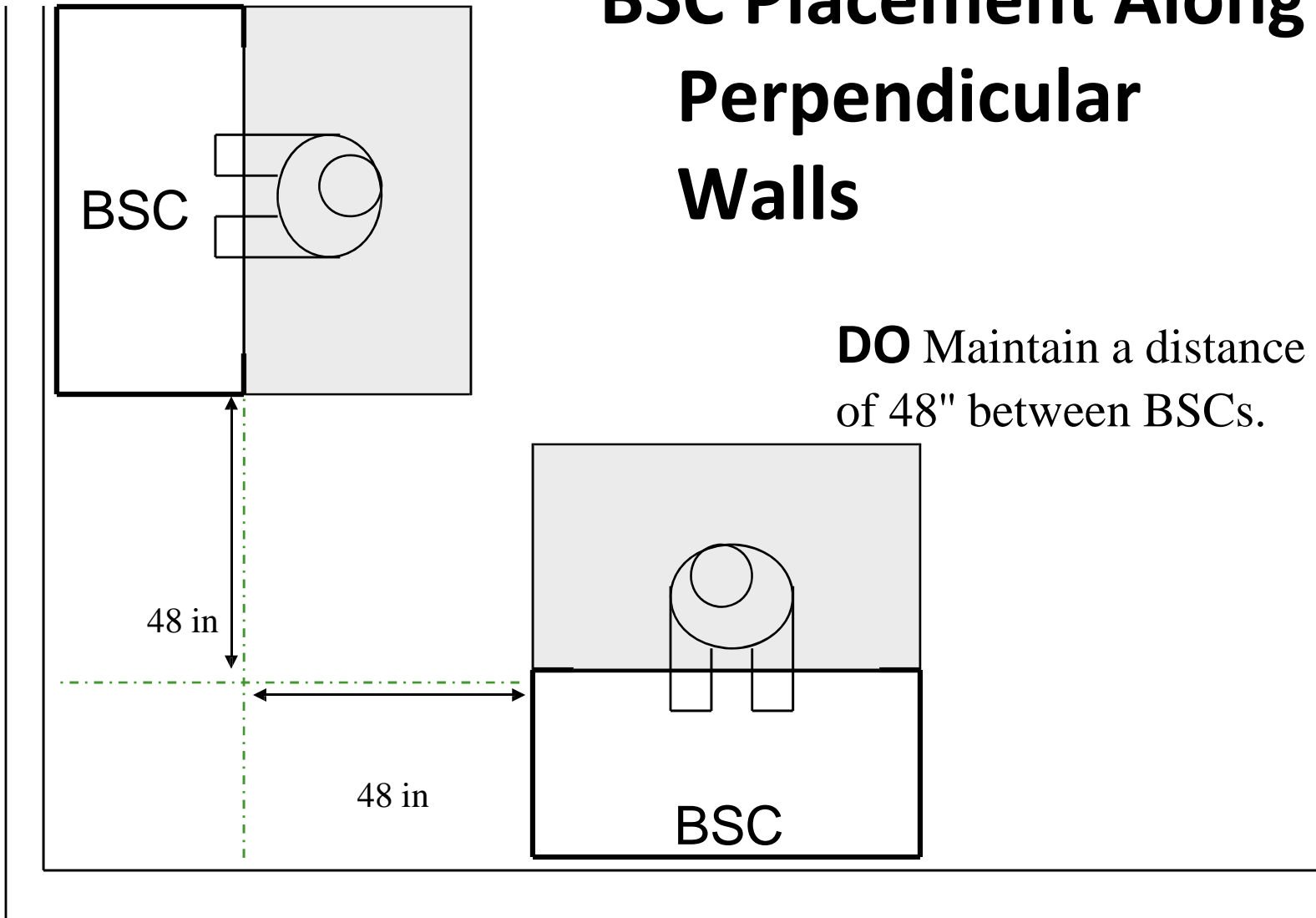
BSC Placement Along Same Wall

DO Maintain a distance of 40" between BSCs along same wall.



BSC Placement Along Perpendicular Walls

DO Maintain a distance of 48" between BSCs.

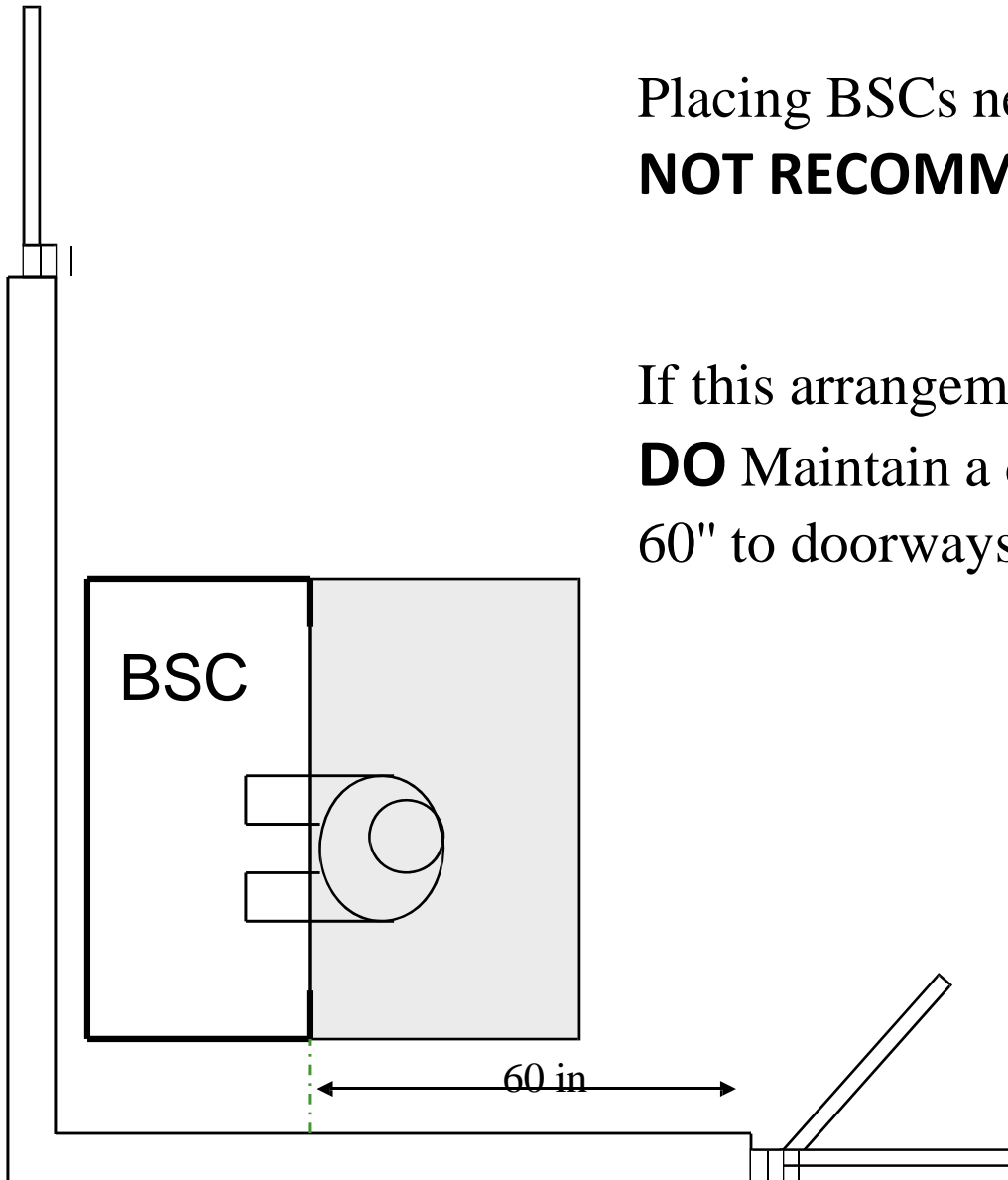


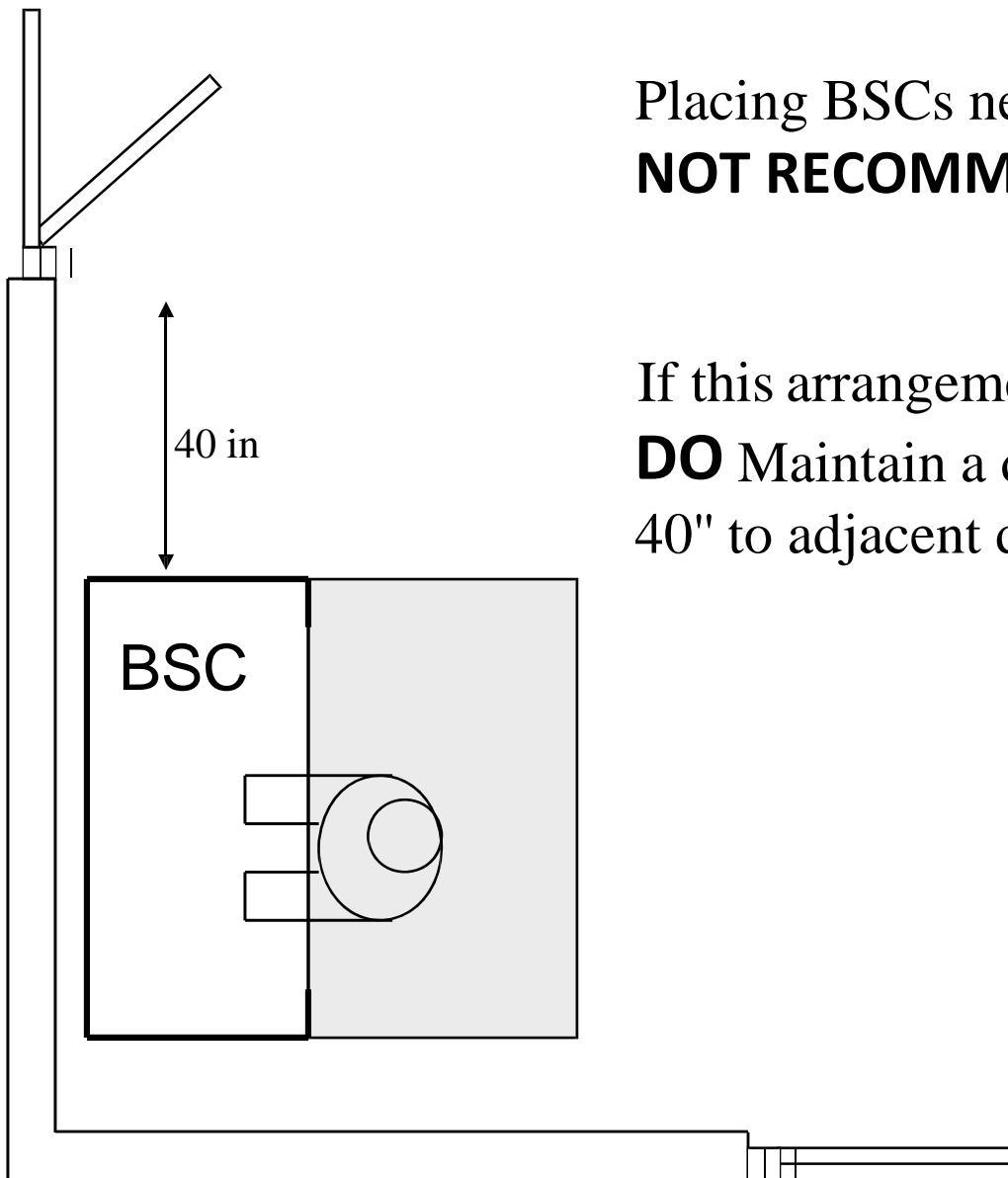
DONT's

BSC Arrangements to Avoid

Placing BSCs near One entryways is **NOT RECOMMENDED.**

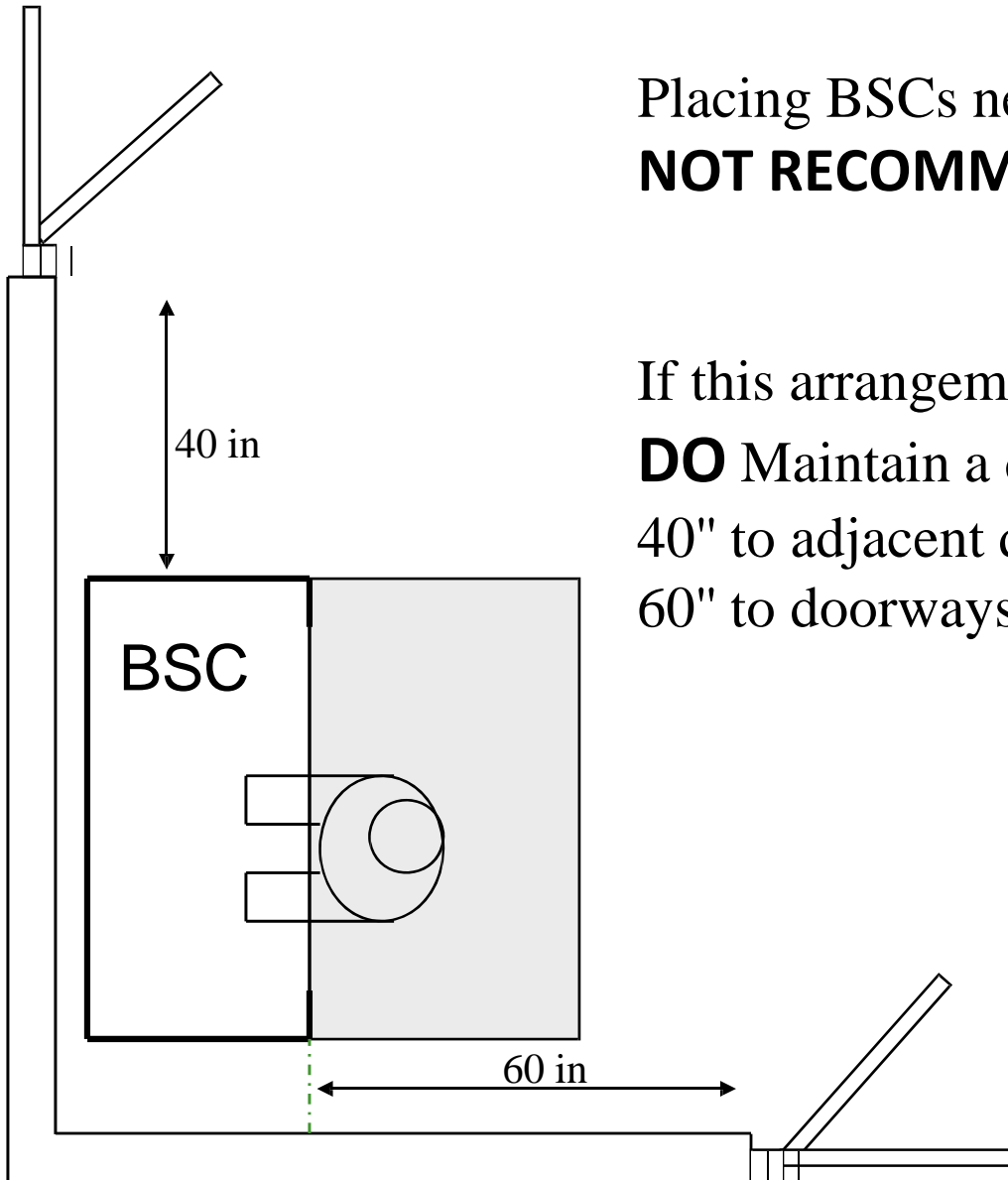
If this arrangement is absolutely necessary:
DO Maintain a distance of
60" to doorways behind workspace.





Placing BSCs near one entryways is
NOT RECOMMENDED.

If this arrangement is absolutely necessary:
DO Maintain a distance of
40" to adjacent doorways

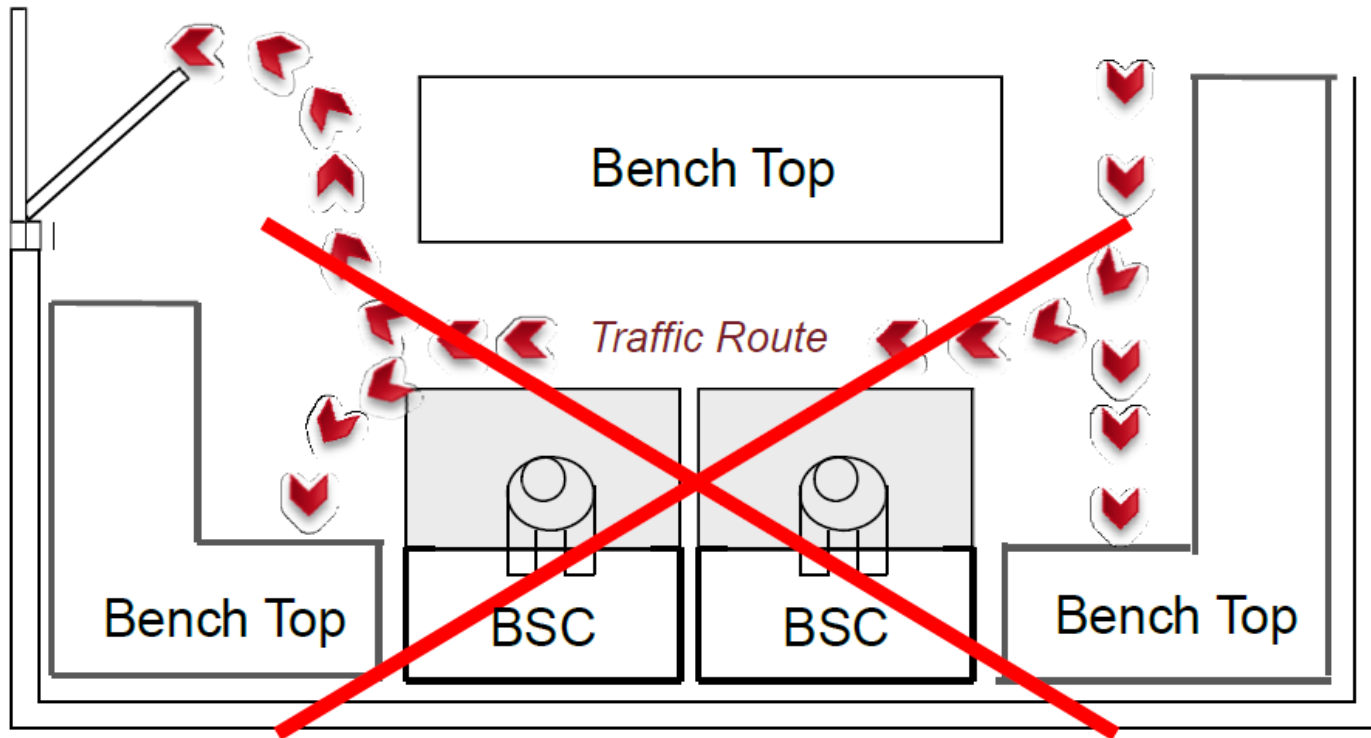


Placing BSCs near two entryways is
NOT RECOMMENDED.

If this arrangement is absolutely necessary:
DO Maintain a distance of
40" to adjacent doorways and
60" to doorways behind workspace.

DO NOT Crowd together bench tops and BSCs.

Too much traffic produces dangerous disturbances to BSC airflow.



DO NOT Place BSCs directly near bench tops.

Designated workspace around BSC will be disturbed.

