CLAIMS:

1. A NBC filtration system for safe room applications comprising at least one of:

a) an air intake integrated into a shielded blast protected window frame, by providing said window frame with an externally invisible air inlet passage connecting between a shielded exterior space and the safe room space, wherein a filtration unit in air flow communication with said air inlet passage, draws air into the safe room through said air inlet passage, redeeming a blast valve; ~~and/or~~

b) an air intake integrated into a shielded blast protected venting sleeve, by providing said venting sleeve with an externally invisible air inlet passage connecting between a shielded exterior space and the safe room space, wherein a filtration unit in air flow communication with said air inlet passage, draws air into the safe room through said air inlet passage; and~~/or~~

c) an air exhaust integrated into a blast protected door frame by providing said door frame with an air outlet passage made in at least one of the top and side profiles of the door frame, wherein an exhaust duct fitted to said air outlet passage, discharges Oxygen lean air out of the safe room through said air outlet passage.

2. A NBC filtration system as claimed in claim 1, wherein said filtration unit is invisibly secured in a cabinet, which is embedded in a concrete wall and being in air flow communication with said air intake.

3. A NBC filtration system as claimed in claim 1 comprising a shielded blast protected window frame, wherein said shielded blast protected window frame is a pocket sliding-shield type window frame.

4. A NBC filtration system as claimed in claim 1 comprising a shielded blast protected window frame, wherein said shielded blast protected window frame is swivel wing type, shielded window frame.

5. A NBC filtration system as claimed in claim 1 comprising a shielded blast protected door frame, wherein said blast protected door frame is an outwardly opening swivel type door frame.

6. A NBC filtration system as claimed in claim 3, wherein said air inlet passage is made through an internal pocket panel of said shielded blast protected window frame.

7. A NBC filtration system as claimed in claim 6, wherein an air inlet cut through a backplate of a~~said~~ cabinet housing the air filtration unit, is fitted to the internal pocket panel such that the air inlet of the cabinet is aligned with said air inlet passage of the internal pocket panel.

8. A NBC filtration system as claimed in claim 7, wherein the~~a~~ filtration unit located in said cabinet, draws air from within said pocket space through said inlet passage and said air inlet, purifies and delivers it into the safe room space.

9. A NBC filtration system as claimed in claim 8, wherein said cabinet is constructed as a frame welded to said backplate forming an embedded in concrete protected space of sufficient volume to store all components of said filtration unit.

10. A NBC filtration system as claimed in claim 7, wherein a thickness of said backplate of the NBC cabinet is calculated to provide amount of blast protection similar to that of the pocket sliding-shield.

11. A NBC filtration system as claimed in claim 7, wherein the filtration unit components that are assembled into said cabinet include at least one of: NBC filter, electric blower, backup rechargeable battery and a second backup manual air pump.

12. A NBC filtration system as claimed in claim ~~3~~6, wherein said air inlet passage is made near a bottom edge of the internal pocket panel and a separate cabinet is embedded in a~~the~~ concrete wall disposed under the window frame, an air inlet is cut through the top wall of the cabinet and an air duct is fitted between the air inlet passage of the internal pocket panel and the air inlet of the cabinet.

13. A NBC filtration system as claimed in claim ~~3~~6, wherein said air inlet passage is made near a side edge of the internal pocket panel and a separate ~~NBC~~ cabinet is embedded in a~~the~~ concrete wall disposed to one side of the window frame, an air inlet is cut through a side wall of the cabinet and an air duct is fitted between the air inlet passage of the internal pocket panel and the air inlet of the cabinet.

14. A NBC filtration system as claimed in claim 4, wherein said air inlet passage is made in a side profile of the shielded blast protected window frame and a separate cabinet is embedded in a~~the~~ concrete wall disposed to the side of the shielded blast protected window frame, an air inlet is cut through a side wall of the NBC cabinet and an air duct is fitted between the air inlet passage of the shielded blast protected window frame and the air inlet of the cabinet.

15. A NBC filtration system as claimed in claim 4, wherein said air inlet passage is made in a bottom profile of the shielded blast protected window frame and a separate cabinet is embedded in a~~the~~ concrete wall disposed below the shielded blast protected window frame, an air inlet is cut through a top wall of the cabinet and an air duct is fitted between the air inlet passage of the shielded blast protected window frame and the air inlet of the cabinet.

16. A NBC filtration system as claimed in any one of claims 2 to 9 or 12 to 15, wherein a removable or hinged cover with an air supply passage, is fitted in front of the cabinet, flush with the internal face of the concrete wall for minimal presence during normal use of the protected safe room.

17. A NBC filtration system as claimed in claim 1, wherein said exhaust duct fitted to the blast protected door frame air outlet passage, ends with an elbow protruding to an~~the~~ exterior of a~~the~~ concrete wall surrounding the safe room.

18. A NBC filtration system as claimed in claim 1 comprising an air exhaust integrated into a blast protected door frame, wherein said exhaust duct is provided with a gravitation over pressure relief valve.

19. A NBC filtration system as claimed in claim 18, wherein said gravitation over pressure relief valve is made of a single metal plate resting on a horizontal seat right above the door frame top profile.

20. A NBC filtration system as claimed in claim 18, wherein said gravitation over pressure relief valve serves also as a blast valve.

21. A NBC filtration system as claimed in claim 2 comprising a shielded blast venting sleeve, wherein said cabinet is embedded in the concrete wall under said venting sleeve, an air inlet is cut through a~~the~~ top wall of the cabinet and an air duct is fitted between the air inlet passage of the venting sleeve and the air inlet of the cabinet.

22. A NBC filtration system as claimed in claim 21, wherein said cabinet, air duct and venting sleeve are provided as a complete assembled unit that is embedded in the concrete wall during construction of the building.

23. A NBC filtration system as claimed in claim 1 comprising a shielded blast protected venting sleeve, wherein a blast valve is assembled on an~~the~~ external end of the venting sleeve and a stopper plate assembled on an~~the~~ internal end, while the NBC system is in operation.

24. A NBC filtration system as claimed in claim 1 further comprising~~wherein~~ a second tubular venting sleeve for discharging~~discharges~~ Oxygen lean air out of the safe room.

25. A NBC filtration system as claimed in claim 24 wherein said second venting sleeve is provided with a spring loaded relief valve fitted to an~~the~~ external end of the second venting sleeve.

26. A method for concealing NBC filtration systems fitted in blast protected safe rooms, comprising the steps of: a. providing at least one of a shielded blast protected window frame and venting sleeve with an integrated, externally invisible, air inlet passage connecting between an~~the~~ exterior space and the safe room space; and b. providing a filtration unit that is in air flow communication with the shielded exterior space, through said air inlet passage.

27. The method as claimed in claim 26, further comprising the step of: c. providing a cabinet, embedded in a~~the~~ concrete wall surrounding the safe room, having an air inlet in flow communication with said inlet passage and placing said filtration unit in the cabinet.

28. The method as claimed in claim 26, further comprising the steps of: d. providing a door frame with an integrated, air outlet passage made in at least one of the top and side profiles of the door frame; and e. providing an exhaust duct fitted to said air outlet passage, discharging Oxygen lean air out of the safe room through said air outlet passage.