

Summary of containment and  
design issue related to  
biocontainment based on  
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Bio2ic

From PC3 training course

# PC Containment Issues

Facility feature	PC1	PC2	PC3	PC4
Compartment method				
Separate zone	-	-	+	+
Separate building	-	-	-	-
Positive Press. suit	-	-	-	+
Primary containment				
BSC	-	±	+	+
BSC class	-	I or II	I, II or III	I, II, III, suit
Ventilated caging	-	-	+	+
Whole room	-	-	±	+
Secondary containment				
Whole room	-	±	+	+

# Design issues

Facility feature	PC1	PC2	PC3	PC4
Entry/Exit people				
Airlock	-	-	+	+
Shower adjacent	-	-	<u>+</u>	+
Shower available	-	+	+	+
Changing room	-	-	<u>+</u>	+
Hands free sink or alternative	+	+	+	+
Entry/Exit materials				
Pass box In	-	-	<u>+</u>	+
Dunk tank out	-	-	<u>+</u>	+
Barrier autoclave	-	-	+	+

# PC Architectural Issues

Facility feature	PC1	PC2	PC3	PC4
Bench work surfaces				
Impervious	<u>+</u>	+	+	+
Chemically resistant	<u>+</u>	<u>+</u>	+	+
Interior surfaces				
Monolithic	-	<u>+</u>	+	+
Chemical resistant	<u>+</u>	<u>+</u>	+	+
Sealed	-	-	+	+
Pressure decay test	-	-	<u>+</u>	+
Doors and windows				
Sealed openings	-	<u>+</u>	+	+
Security device	-	<u>+</u>	+	+

## PC Mechanical Issues

Facility feature	PC1	PC2	PC3	PC4
HVAC				
Separate exhaust	<u>+</u>	+	+	+
No recirculation	-	<u>+</u>	+	+
Directional airflow	-	+	+	+
Pressure gradient	-	-	+	+
Supply/exhaust coordination	-	<u>+</u>	+	+
HEPA filtration	-	-	+	+
BMS controls	-	<u>+</u>	+	+
Redundancy	-	-	<u>+</u>	+
Plumbing issues				
Backflow prevention	-	+	+	+
HEPA on vents	-	-	+	+