

Optimised execution sequence with site phasing and BIM coordination

Integrated approach for controlled execution

The integration of **the Acoustiblocs** is part of an optimized execution sequence, supported by upstream BIM coordination, aimed at reducing interference, improving constructability and ensuring the continuity of acoustic performance in the plenum.

Phase 1 – BIM Coordination and Modeling

1. Modeling of Mechanical, Electrical, and Fire Protection (MEP) Systems in the Plenum
 2. Clash detection between networks and structural elements
 3. Location of critical acoustic transmission areas (bulkhead heads, penetrations, junctions)
 4. Integration of the volumes required for the Acoustiblocs into the model
 5. Production of coordinated execution details (shop drawings)
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Phase 2 – Installation of technical systems (MEP rough-in)

1. Complete installation of HVAC, sprinklers, electricity and telecommunications networks in the plenum
2. On-site validation with BIM model (as-built)
3. Optimization of clearances to allow efficient installation of acoustic blocks

Phase 3 – Installation of the continuous suspended ceiling

1. Installation of the ceiling system over the entire surface, without interruption at the partition locations
2. Elimination of intricate details at the headboard (bulkheads, cutouts, adjustments)
3. Standardize finish and reduce installation tolerances

Phase 4 – Installation of ceiling partitions

1. Installation of partitions (gypsum, modular or glazed systems) under the ceiling
 2. Simplification of the joints at the head of the partition (absence of complex plenum sealing)
 3. Precise alignment with the modeled elements (BIM-to-field)
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Phase 5 – Installation of the Acoustiblocs

1. Stacking of **Acoustiblocs** above the partitions to the structural slab
 2. Fit around MEP penetrations using modular formats and decompression zones
 3. Creation of a continuous sound barrier limiting lateral transmissions (flanking paths)
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Technical and operational benefits

Improved coordination

1. Reduced cross-disciplinary conflicts with BIM planning
2. Improved predictability of plenum interventions

Optimized constructability

1. Logical and repeatable sequence

Controlled acoustic performance

1. Continuity of barriers at the head of the bulkhead
2. Reduction of variations in execution influencing acoustic performance

Site efficiency

1. Reduction of overall lead times
2. Reduced overhead costs related to coordination and recovery

Conclusion

The integration of **Acoustiblocs** into a coordinated BIM approach makes it possible to align design and execution, while ensuring constant acoustic performance and overall optimization of construction processes.