



CLASH DETECTION V/S CLASH AVOIDANCE. ARE THEY SAME?

Prevention is better than a cure. We all have heard this saying. We can say that Prevention is Clash Avoidance, and Cure is Clash Detection. Early collaboration is crucial if the final design is to be clash-free, and automation processes through Building Information Modelling (BM) have the capacity to reduce clashes through 3D design coordination. The table below shows us the core differences between Clash Detection vs Clash Avoidance, along with the way forward.

<p>01</p> <p>NATURE OF PROCES</p> <p>CLASH DETECTION A reactive process (after-the-fact) that identifies collisions only after design decisions have been finalized</p> <p>CLASH AVOIDANCE A proactive process that ensures design outcomes are agreed upon collaboratively through joint design.</p> 	<p>02</p> <p>PROJECT PHASE</p> <p>CLASH DETECTION Primarily a pre-construction activity performed on completed models.</p> <p>CLASH AVOIDANCE An ongoing process that runs throughout all phases of the project life cycle.</p> 	<p>03</p> <p>PRIMARY FOCUS</p> <p>CLASH DETECTION Focuses on the Clash Detection software and refining specific "clash-rule sets.</p> <p>CLASH AVOIDANCE Emphasis is placed on the nature of collaboration between MEP, Structural, and Architectural disciplines.</p> 	<p>04</p> <p>SKILL REQUIREMENTS</p> <p>CLASH DETECTION Requires basic technical coordination and software proficiency.</p> <p>CLASH AVOIDANCE Requires rigorous BIM management, leadership, and highly experienced designers.</p> 
<p>05</p> <p>DATA ENVIRONMENT</p> <p>CLASH DETECTION Does not require shared situational awareness; teams often work in silos until the check.</p> <p>CLASH AVOIDANCE Requires shared situational awareness, where every designer understands how their work impacts others.</p> 	<p>06</p> <p>INFORMATION FLOW</p> <p>CLASH DETECTION Focuses on using tools to find errors rather than promoting early communication</p> <p>CLASH AVOIDANCE Promotes information sharing and co-creation between all stakeholders.</p> 	<p>07</p> <p>DESIGNER EXPERTISE</p> <p>CLASH DETECTION Relies on the coordinator's ability to run software and generate reports.</p> <p>CLASH AVOIDANCE Requires experienced designers with a broader, multidisciplinary view of the design process.</p> 	<p>08</p> <p>WORKFLOW IMPACT</p> <p>CLASH DETECTION Involves identifying errors that require redesign, often leading to "model rework."</p> <p>CLASH AVOIDANCE Reduces design iteration time since decisions are taken jointly and information is shared freely.</p> 