

Course challenge exercise

Coordinate structural and MEP models in Model Coordination

Use Autodesk Construction Cloud (ACC) Model Coordination to deliver a concise clash-status report before the design freeze milestone. As the structural engineer, you've received the latest MEP model and must verify that structural concrete and steel elements are free of critical service penetrations, while separating true conflicts from routine sleeves and embeds.

Your task is to build two coordination views that isolate the exact structural and MEP categories under review, rerun clash detection against those filtered scopes, mark one legitimate sleeve as Not an Issue, promote two geometry conflicts to formal Issues, and export a PDF report that captures the open clashes for next week's coordination meeting.

The exercise tests everything you've learned about model selection, category filtering, clash detection and assignment, issue creation, and reporting within Model Coordination.

Complete the required activities:

1. Create View #1 – Foundations & Walls vs Piping / Lighting
 - a. Models: Structural and MEP
 - b. Categories to include:
Structural: Walls, Structural Foundations
MEP: Pipes, Pipe Fittings, Lighting Fixtures
 - c. Save the view as Foundations-Walls vs Pipes-Lighting (Public).
2. Run clashes for View #1: Group results as you prefer and identify a clash that represents a valid interface. Classify this class as Not an Issue.
3. Create View #2 – Steel vs Ducts / Cable Tray / Equipment / Lighting
 - a. Models: Structural and MEP
 - b. Categories to include:
Structural: Structural Framing, Structural Columns
MEP: Ducts, Duct Fittings, Flex Ducts, Mechanical Equipment, Cable Tray, Cable Tray Fittings, Lighting Fixtures
 - c. Save the view as Steel vs MEP Systems (Public).
4. Run clashes for View #2– Locate two distinct clashes that require design action. For each clash, create and document an Issue (Type = Clash).

5. Export coordination report: From Model Coordination > Issues, export a PDF report that lists the open clash Issues. Save the file to your personal folder in Docs in Docs and name it *Coordination_Report_<initials>.pdf*.
6. Submit any screenshots, reference documents, or assumption notes used to complete the exercise (optional).

Success Criteria:

- **Two coordination views** are saved with exactly the specified categories.
- **One clash in View #1** is correctly marked Not an Issue with an appropriate reason/comment.
- **Two clashes in View #2** are logged as separate Open Issues with clear titles, descriptions, and assignments.
- **Exported report** lists the open Issues, with all metadata visible.
- All deliverables are present in the project folder, named correctly, and readable.

Grading Rubric:

	Advanced	Proficient	Basic	Emerging
View creation & filters	Both views include exactly the requested models & categories; names and descriptions accurate	Both views created; 1–2 minor category or naming errors	One view incorrect or missing categories	Views missing or unusable
Clash classification	Valid interface correctly marked Not an Issue with proper reason/comment	Not an Issue created; minor metadata errors	Not an Issue created but wrong clash or vague comment	No Not an Issue item created
Issue creation	Two separate Issues, clear titles, detailed descriptions, proper assignees	Two Issues with minor detail gaps	One Issue only, or metadata is incomplete	No valid Issues

Report export	Report shows both items, clear formatting, saved to the correct folder	Report exported; minor naming/location issues	Report exported but missing an item	Report not exported or unreadable
Submission quality	All required files uploaded, named correctly, easy to follow	Files present; small naming/formatting flaws	Some files are missing or unclear	Submission incomplete or inaccurate