Automatic checking for ICU Submission

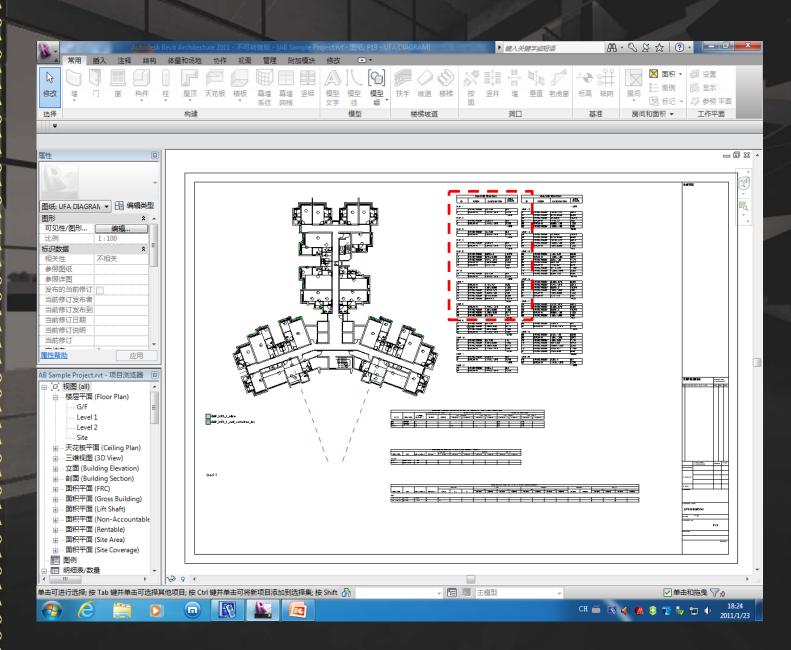
Current Practice

- Submission in hardcopy only
- 2. Involves over thousands nos. of calculation
- 3. Requires more than a week to check

Proposed Practice

- Submission in both hardcopy and softcopy in REVIT format
- 2. The softcopy allows an automatic checking by computer software.
- 3. The hardcopy allows a manual checking same as current practice.
- 4. Greatly improves efficiency of the checking process.

Softcopy of ICU Submission



Close up of Calculation AA - S & A | ? -▶ 鍵入关键字或短语 附加模块 修改 选择 属性 几何图形 修改 剪贴板 修改|房间 **UFA & UFS SCHEDULE** AREA → 品 编辑类型 房间 (1) ID ROOM CALCULATION (SQ.M) 限制条件 标高 Level 1 上限 Level 1 FLAT 1 2438.4 高度偏移 底部偏移 LIVING ROOM 4 x 2.35 9.4 **UNIT 13** 尺寸标注 41 5 KITCHEN 1.415 x 1.575 2.229 2.229 m 周长 5980.0 11.629 42 房间标示高度 2438.4 未计算 FLAT 2 45 标识数据 53 2.35 x 4 LIVING ROOM 9.4 KITCHEN KITCHEN 2.229 56 1.415 x 1.575 属性帮助 应用 58 11.629 AB Sample Project.rvt - 项目浏览器 FLAT 3 LIFT SHAFT SCHEDULE LIVING ROOM 4 x 2.35 9.4 **UNIT 14** SCHEDULE MINIMUM NUMI KITCHEN 1.575 x 1.415 2.229 35 SCHEDULE OF AREA TO BE [SCHEDULE OF PERSONS FOR 36 11.629 SCHEDULE OF SANITARY FIT 37 SCHEDULE OF SANITARY FIT FLAT 4 LIVING ROOM 4 x 2.35 47 9.4 UFA & UFS SCHEDULE UFA SCHEDULE KITCHEN 2.229 49 1.575 x 1.415 □ 图纸 (all) P19 - UFA DIAGRAM 11.629 P20 - GFA DIAGRAM FLAT 5 **UNIT 15** P21 - GFA SUMMARY AND S P22 - FRC DIAGRAM LIVING ROOM 5.625 x 3 16.875 63 門族 由 专用设备 12 0.75 x 0.485 0.364 LIVING ROOM 64 ⊞....坡道 13 67 LIVING ROOM 2.24 x 1.615 3.618 由… 填充图案 < III → 单击可进行选择;按 Tab 键并单击可选择其他项目;按 Ctrl 键并单击可将新项目添加到选择集;按 Shift CH 🥌 🖪 🥠 🦚 🤃 📆 🏷 🖫 🕩

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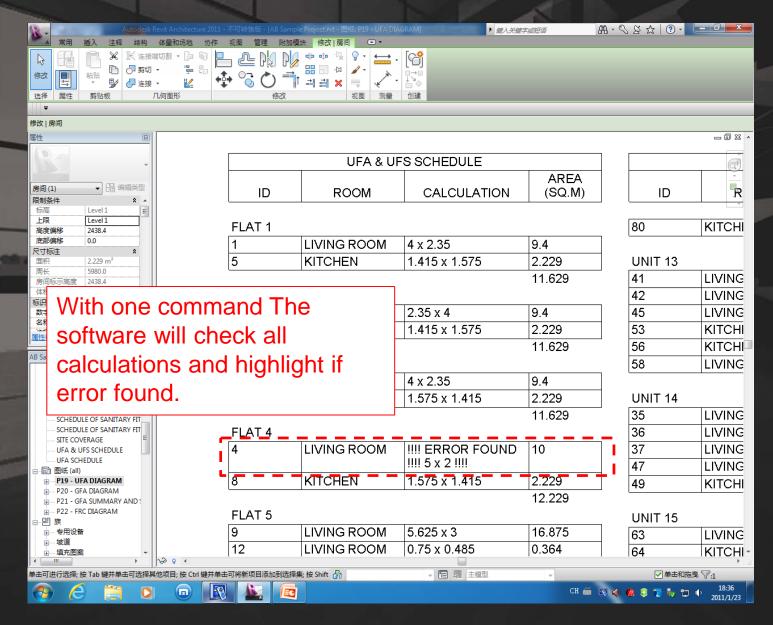
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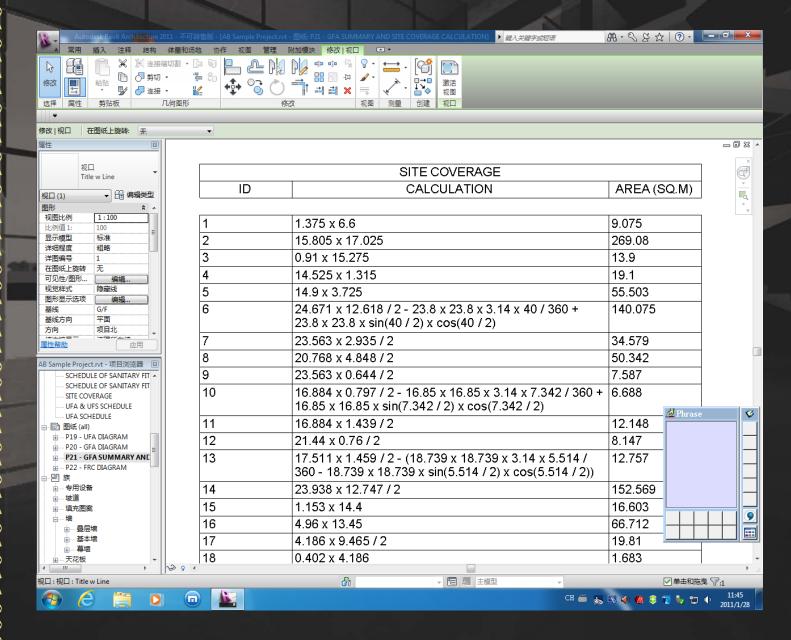
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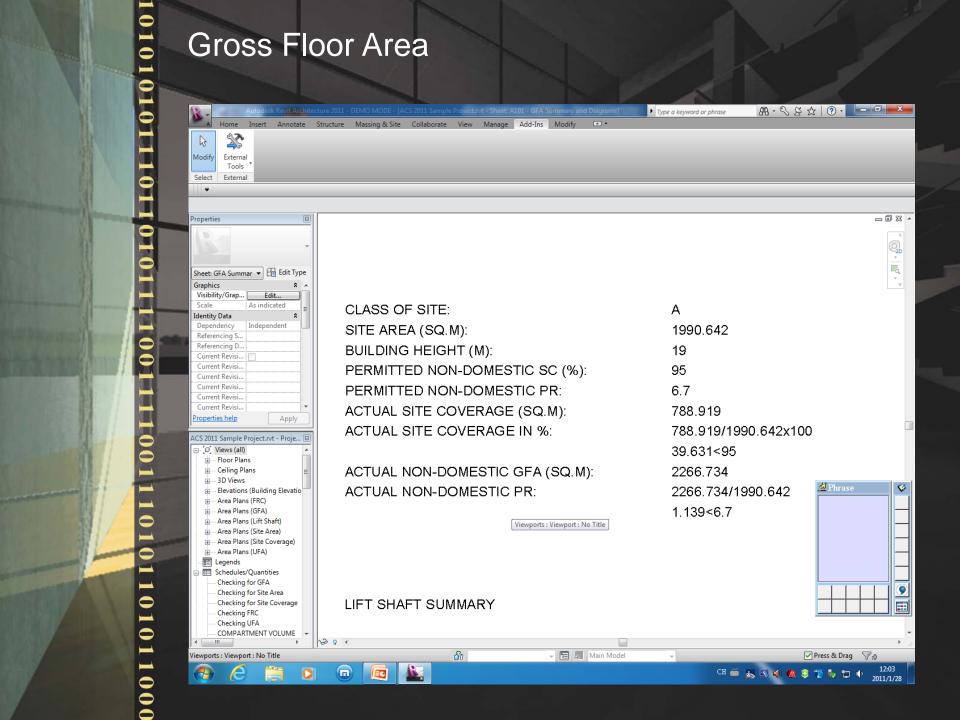
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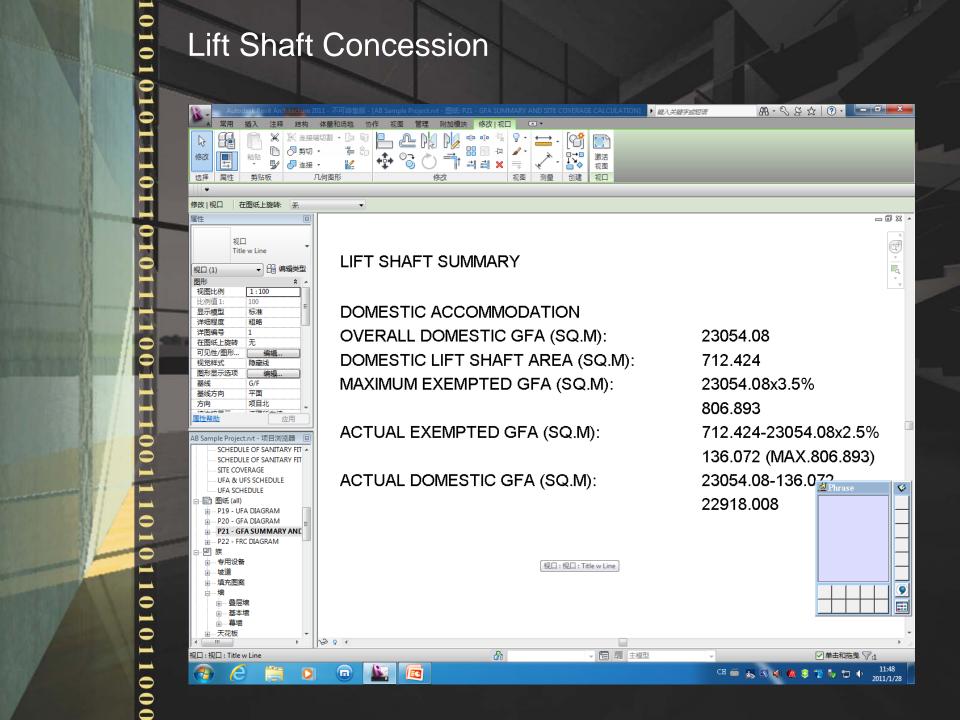
Automatic checking of calculation



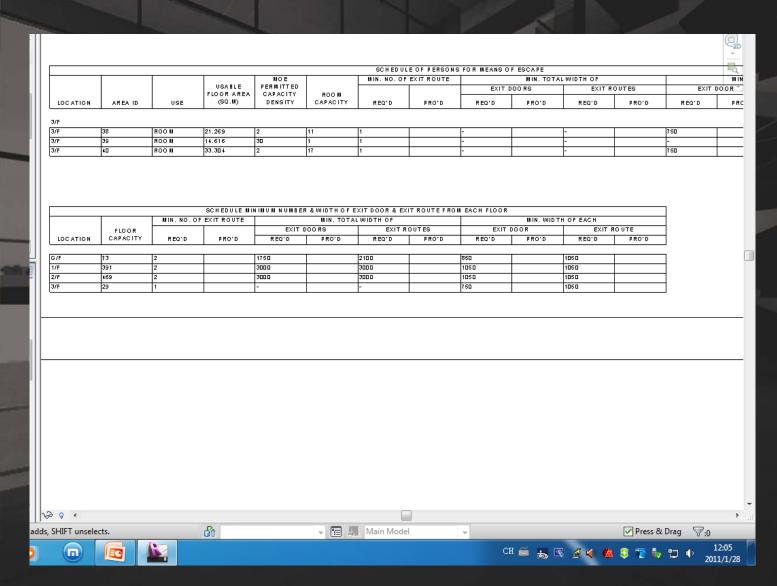
Support checking of area breakdown







Means of Escape and Sanitary Fitment Requirement



Compartment Volume AA - S & A | ? -Type a keyword or phrase Massing & Site Collaborate View Manage Add-Ins Modify Modify External Tools External - 0 X · Properties Sheet: FRC Diagram: ▼ 🔠 Edit Type Visibility/Grap... 1:300 Identity Data Independent Dependency Referencing S... COMPARTMENT VOLUME 3575 975 Referencing D... **FLOOR** VOLUME Current Revisi... Current Revisi... COMPARTMENT AREA (SQ.M) HEIGHT (M) (CU.M) Current Revisi.. Current Revisi... Current Revisi... 4.3 143.495 617.029 Current Revisi... 78.954 4.3 Properties help Apply 339.502 D 393.832 4.3 1693.478 ACS 2011 Sample Project.rvt - Proje... 🗵 LIFT SHAFT SCHEDULE SCHEDULE MINIMUM NUMI SCHEDULE OF PERSONS FOR SCHEDULE OF SANITARY FIT SITE COVERAGE Sheets (all) A101 - GFA Summary and D = A102 - UFA Diagrams A103 - FRC Diagrams P Families 3/ - Annotation Symbols A1 metric M_Area Tag ⊕ M_Area Tag_GBP_Compc M_Area Tag_GBP_Domes M_Area Tag_GBP_NonDo i M_Area Tag_GBP_NonDt ▼ Click to select. TAB for alternates. CTRL adds. SHIFT unselects. do Press & Drag 7:0 CH 🚎 😹 🗷 🥒 🌗 🧥 🤁 👣 🍖 🖫 🕩 EC

Fire Resistance Requirement AA - Q & ☆ | ? -Type a keyword or phrase Structure Massing & Site Collaborate View Manage Add-Ins Modify Modify External Tools External - 0 X Properties Sheet: FRC Diagram: ▼ 🔠 Edit Type Visibility/Grap... Edit... 1:300 Identity Data FIRE RESISTANCE REQUIREMENT FOR ELEMENTS OF CONSTRU Independent Dependency R.C. WALL => 1% V.R. R.C. BEAM TOTAL COMPARTME VOLUME COVER TO COVER TO Referencing D... NT CLASS (CU.M) FRP REQ'D THK. STEEL THK STEEL THK. Current Revisi... Current Revisi... Current Revisi... -(BASEMENT) 204.513 180 60* 450 Current Revisi... 15 617.029 30 200 Current Revisi... (CARPARKING Current Revisi... Properties help Apply 339.502 75 15 200 30 200 (CARPARKING ACS 2011 Sample Project.rvt - Proje... 🖾 LIFT SHAFT SCHEDULE 7 (PLACE OF 1693.478 75 15 200 30 200 SCHEDULE MINIMUM NUMI AŠSEMBLY) SCHEDULE OF PERSONS FOR 7 (PLACE OF 4314.993 15 30 75 200 200 SCHEDULE OF SANITARY FIT ASSEMBLY) SITE COVERAGE 75 15 7 (PLACE OF 3505.746 200 30 200 Sheets (all) ASSEMBLY) A101 - GFA Summary and D = A102 - UFA Diagrams 7 (PLACE OF 433.476 75 15 200 30 200 AŠSEMBLY) A103 - FRC Diagrams P Families - Annotation Symbols A1 metric M_Area Tag ⊕ M_Area Tag_GBP_Compc M_Area Tag_GBP_Compc M_Area Tag_GBP_Domes M_Area Tag_GBP_NonDo i M_Area Tag_GBP_NonDt ▼ → 🔚 🧸 Main Model Click to select. TAB for alternates, CTRL adds, SHIFT unselects. de la Press & Drag 7:0

Conclusion This greatly improves the efficiency of the checking 1. mechanism The software is easy to use with only one command required 2. Training and technical support can be provided to ensure a 3. successful implementation Hardcopy will also be submitted for manual checking 4.

