F.L.I.P.

Family Library Interchange Program

建築信息模型族庫交換計劃

Presented by
David Fung
Managing Director, A.C.I.D.

1.0 Background

1.1 F.L.I.P. – Family Library Interchange Program 建築族群交換計劃

A co-operative project between Autodesk Far East Limited and
Advanced Consultation Development(ACID) to promote BIM application

Supported by:

1.0 Background

1.2 Why do we need a suitable component?

Component A

Component B

Target

1.0 Background

1.3 Existing problems:

- US Safety Standard
- Left-hand Driving
- Imperial Measurements (mph, lb, hp)

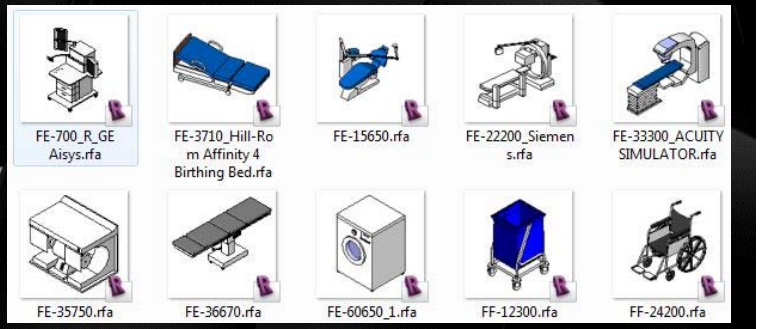
Default Library (US Platform)

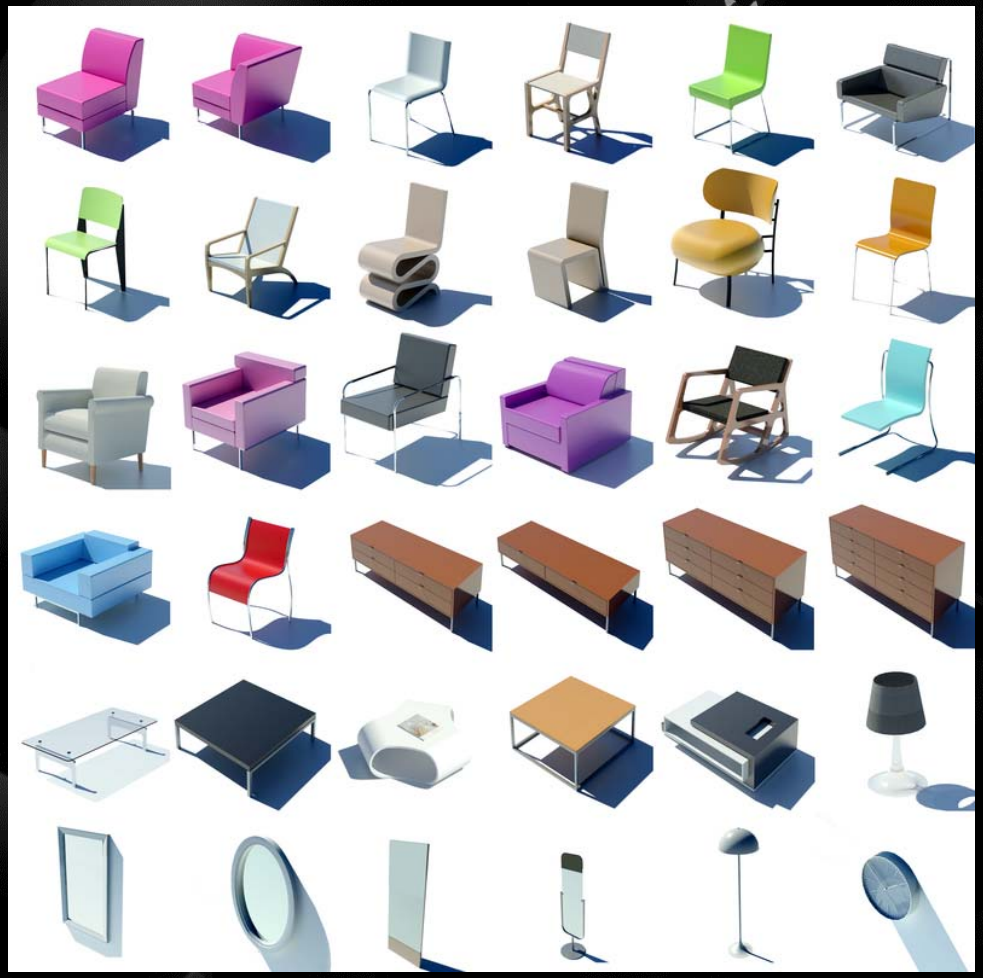
- Local Safety Standard
- Right-hand Driving
- Metric Measurements (km/h, kg, kg-m)

Components with Local Practice

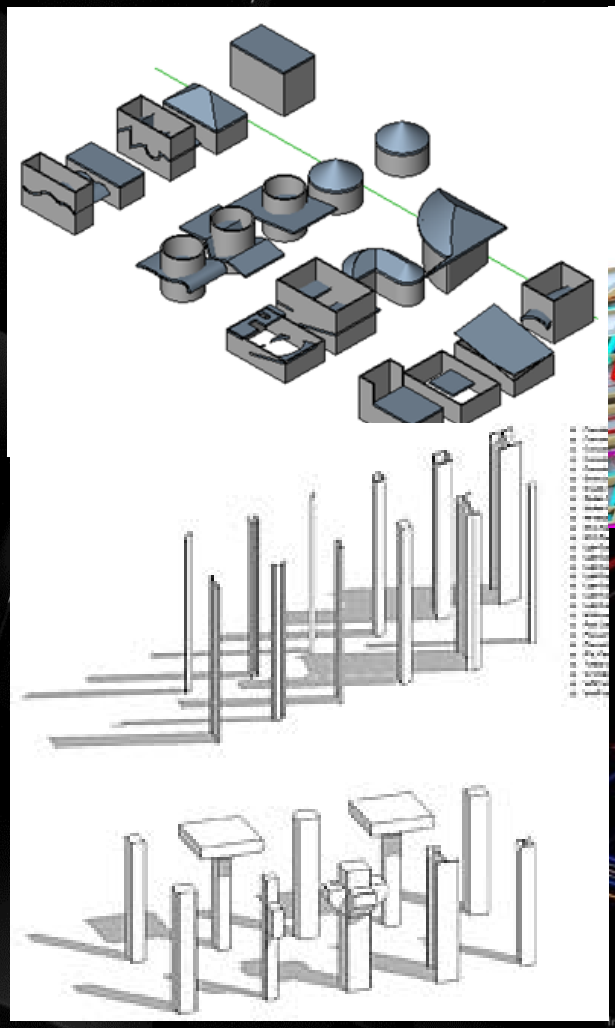
Project in HK

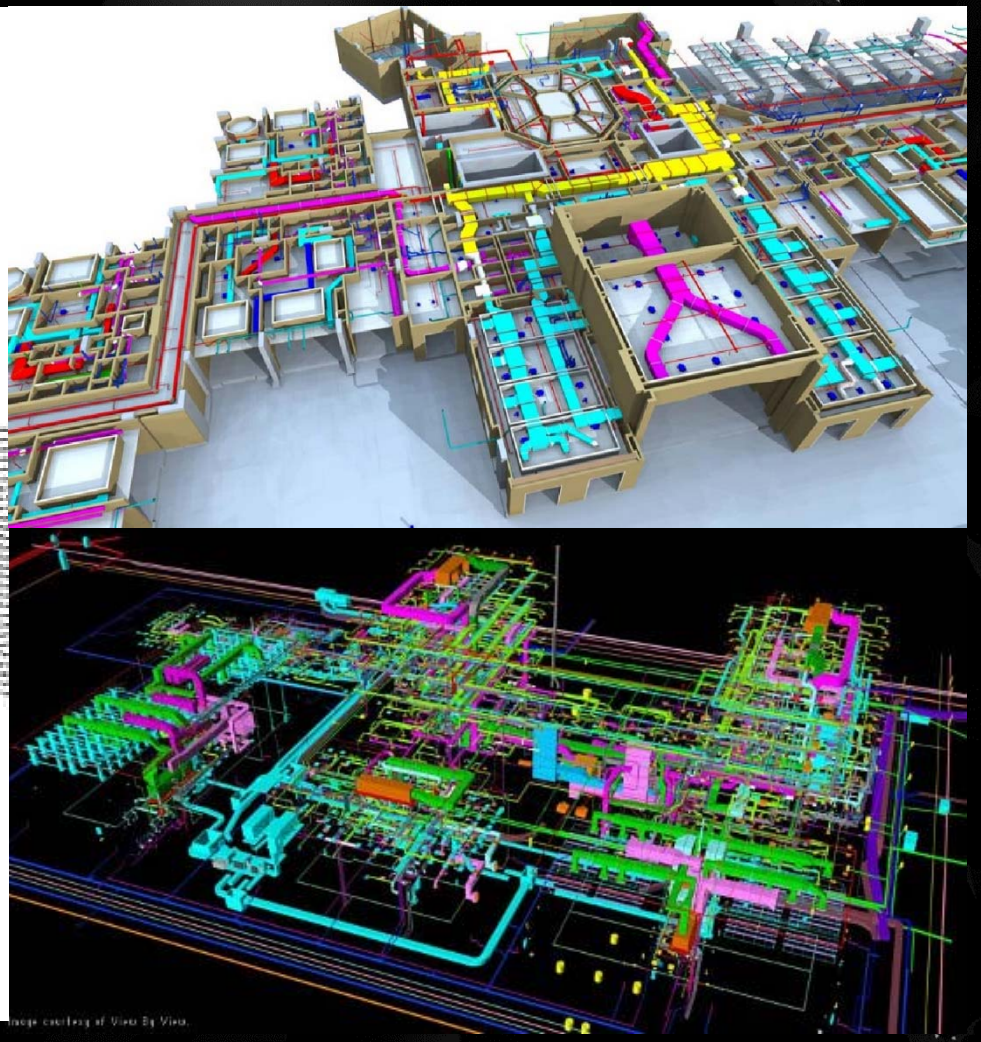
1.0 Family – 建築信息族群





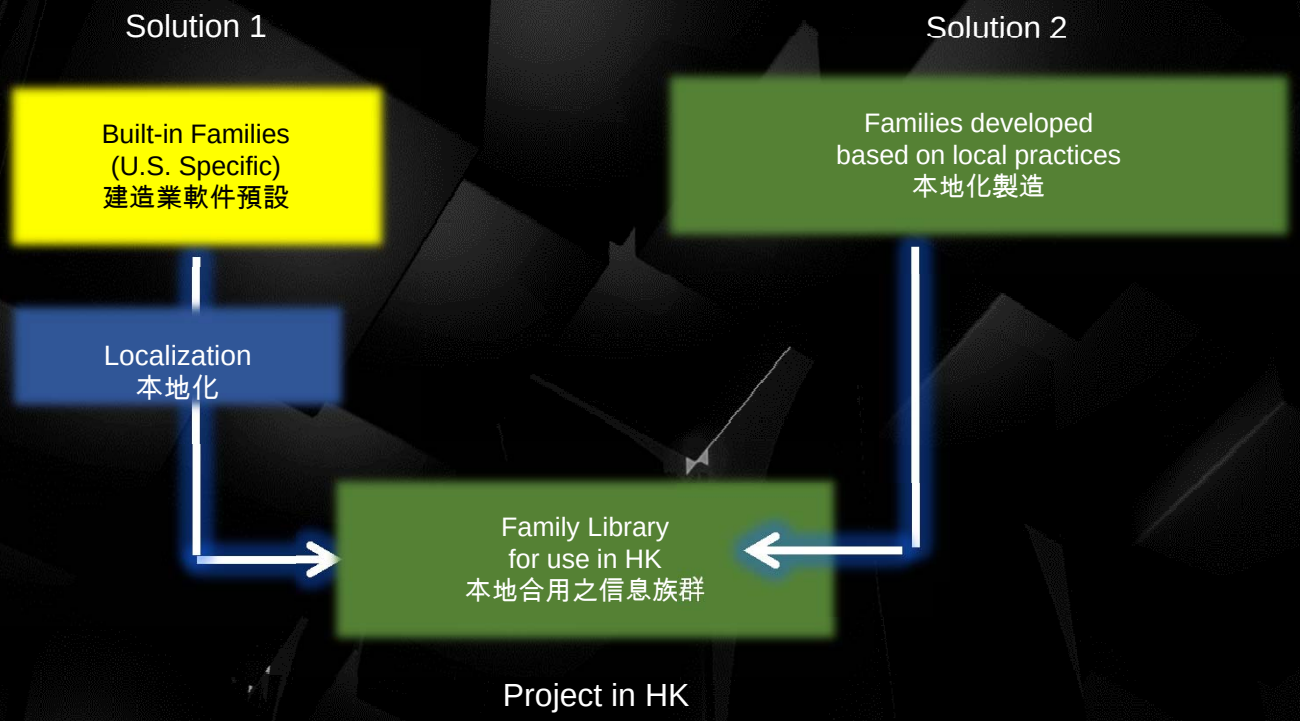
1.0 Family – 結構/機電信息族群





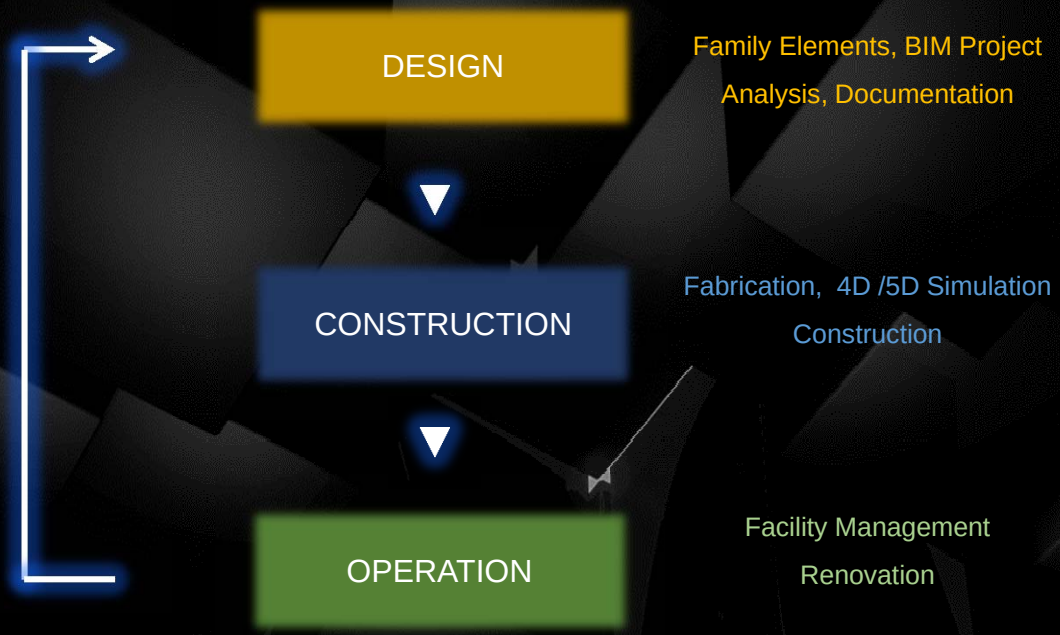
2.0 Developing the Family Library 模型族庫

2.1 Development and localization of Family **本地化過程**



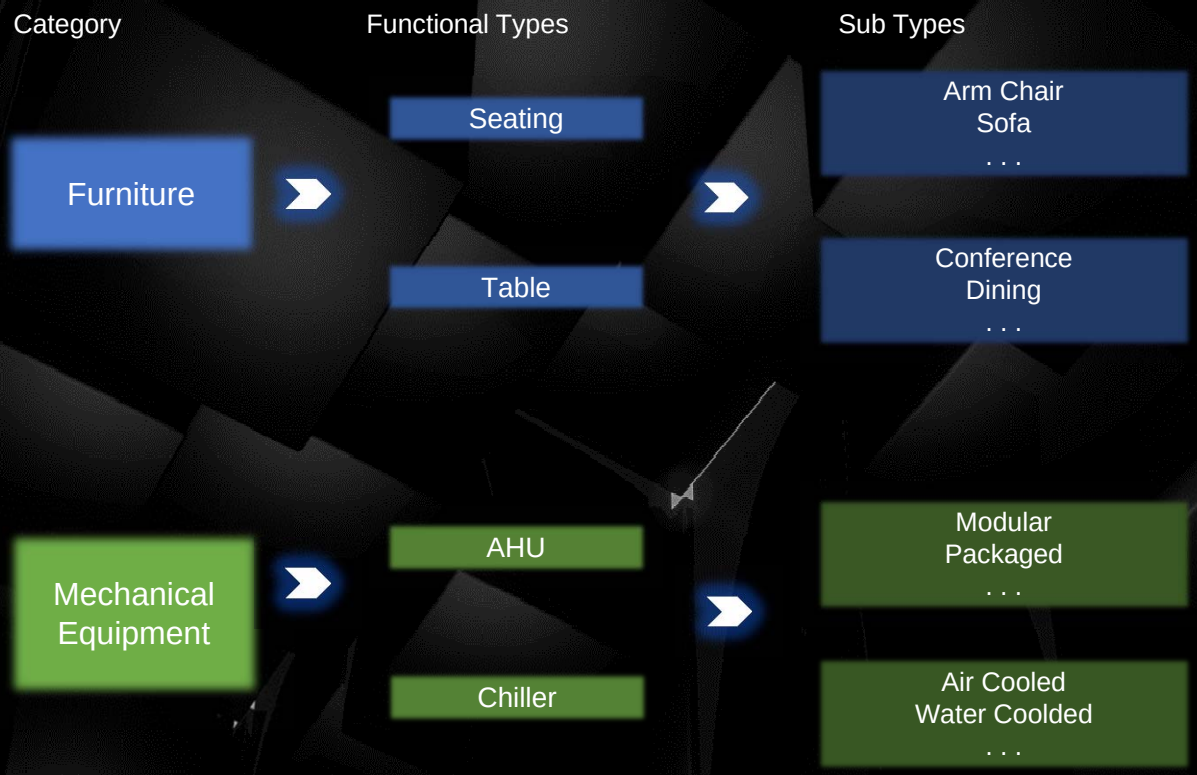
2.0 Developing the Family Library 模型族庫

2.2 Family – Origins of the BIM Process 成果主導



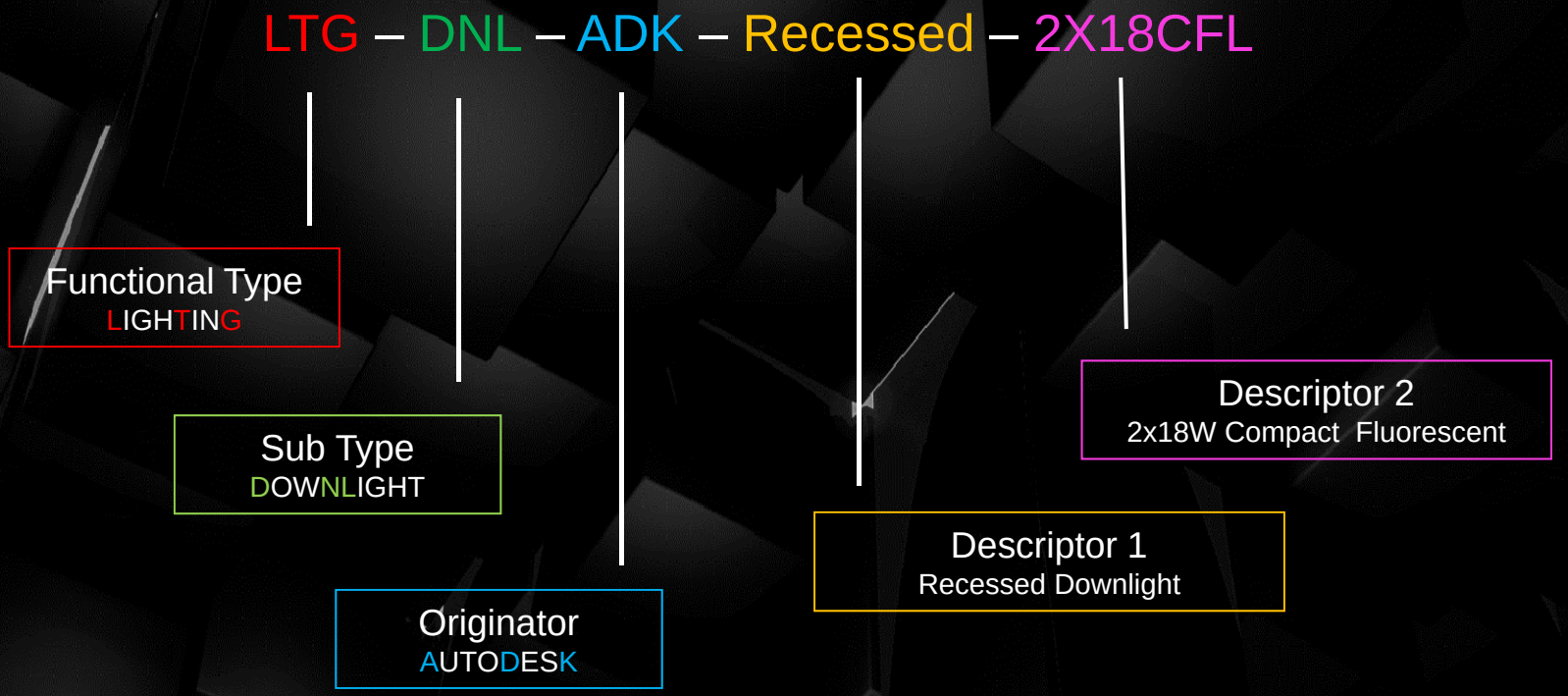
3.0 The Structure of the Family Library 模型族庫標準化

3.1 Hierarchy of the Family



3.0 The Structure of the Family Library模型族庫標準化

3.2 Naming Convention 命名



3.0 The Structure of the Family Library 模型族庫標準化

3.3 Naming Convention of the Family 命名

Functional Type:		Sub Type:	
AHU	– AIR HANDLING UNIT	FAN	- FAN MODULE
		FLT	- FILTER MODULE
COL	– COLUMN	MTC	- METAL CLAD
		WDT	- WOOD TIMBER
DOR	– DOOR	BFD	- BIFOLD
		SLD	- SLIDING
FAD	– FIRE ALARM DEVICES	FHS	- FIRE HOSE CABINET
		SMD	- SMOKE DETECTOR

3.0 The Structure of the Family Library 模型族庫標準化

3.4 Categories to be covered in the Library 分類標準

Architectural

CASEWORK
COLUMNS
CURTAIN PANELS
DETIAL ITEMS
DOORS
ELECTRICAL EQUIPMENTS
ENTOURAGE
FURNITURE
FURNITURE SYSTEM
LIGHTING FIXTURES
MECHANICAL EQUIPMENTS
PARKING
PLANTING
PUMPLING FIXTURES
RAILINGS
SITE ITEMS
SPECIALTY EQUIPMENTS
WINDOWS

MEP

AIR TERMINAL
CABLE TRAY FITTINGS
COMMUNICATION DEVICES
CONDUIT FITTINGS
DATA DEVICES
DETIAL ITEMS
DUCT ACCESSORIES
ELECTRICAL EQUIPMENT
ELECTRICAL FIXTURES
FIRE PROTECTION
LIGHTING FIXTURES
MECHANICAL EQUIPMENT
NURSE CALL DEVICES
PIPE ACCESSORIES
PLUMPING FIXTURES
SECURITY DEVICES
SPECIALTY EQUIPMENTS
SPRINKLERS
TELEPHONE DEVICES

Structural

CURTAIN PANEL
STRUCTURAL COLUMNS
STRUCTURAL CONNECTIONS
STRUCTURAL FOUNDATIONS
STRUCTURAL FRAMING
STRUCTURAL REBAR SHAPES
STRUCTURAL RETAINING WALL
STRUCTURAL STIFFENERS
STRUCTURAL TRUSSESS

4.0 Deliverables of the Family Library 出圖標準

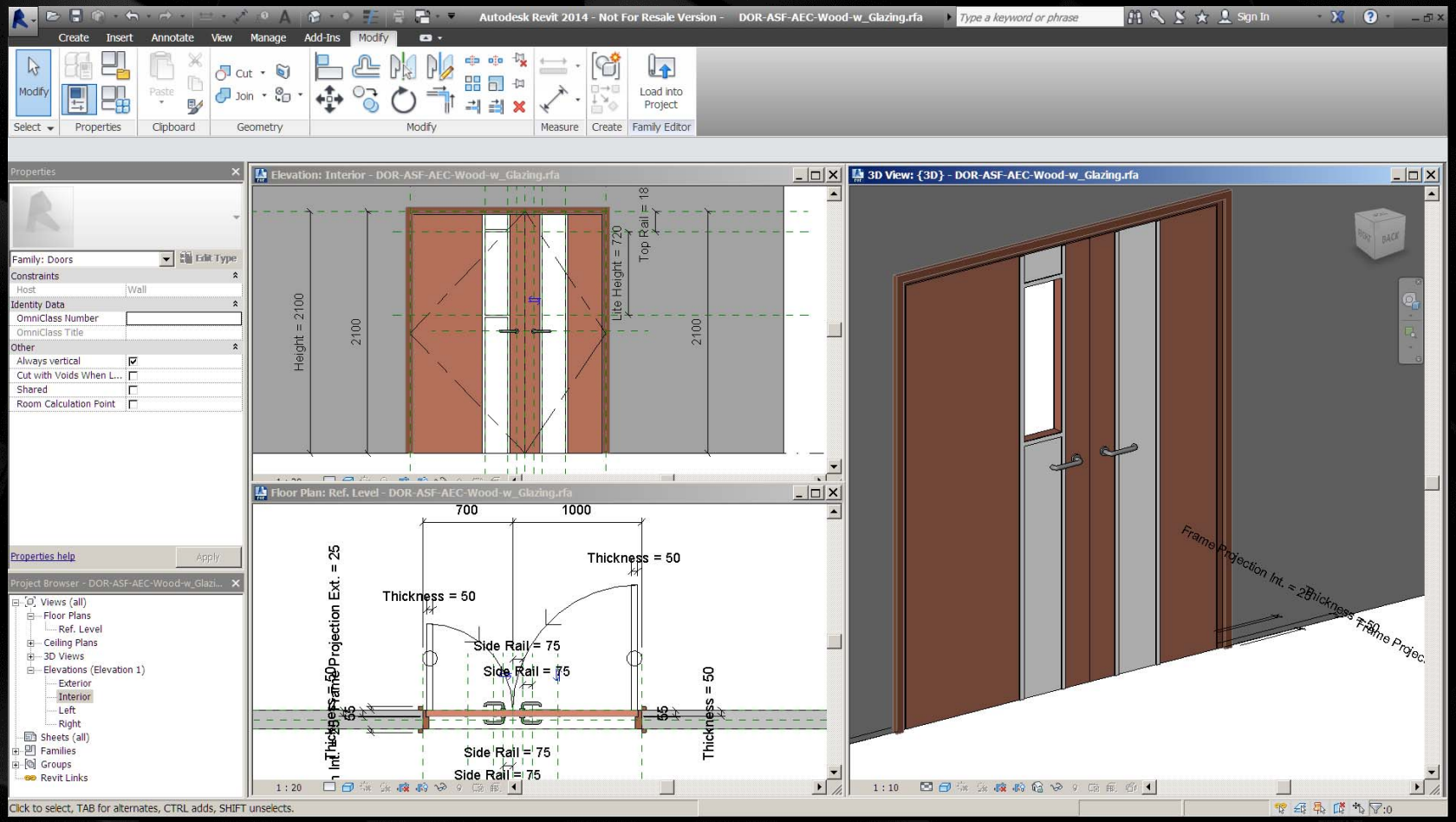
3D Geometry

2D Symbol

Annotation, Detail Items

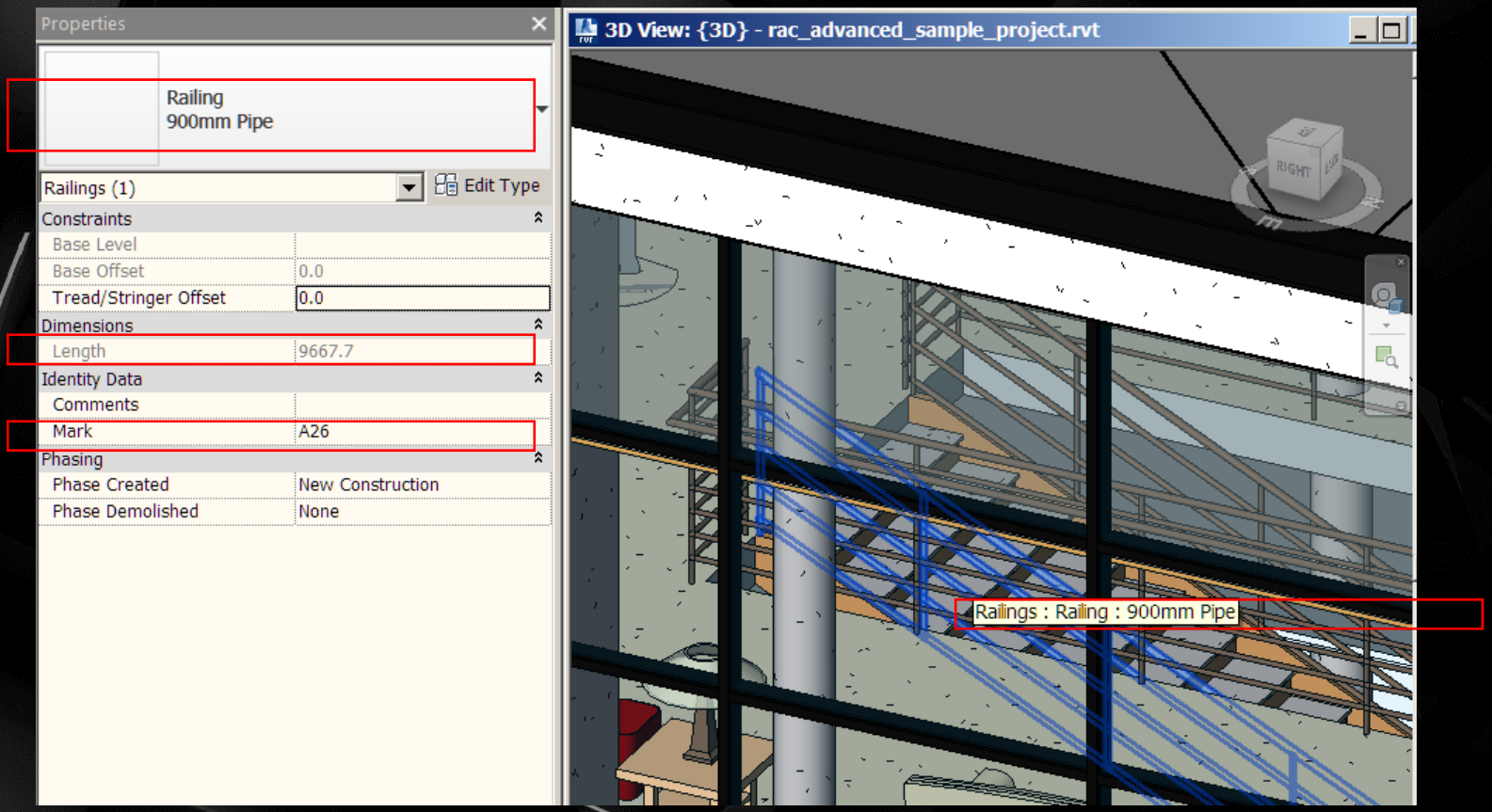
4.0 Deliverables of the Family Library

4.1 Family Content 包含本地化信息



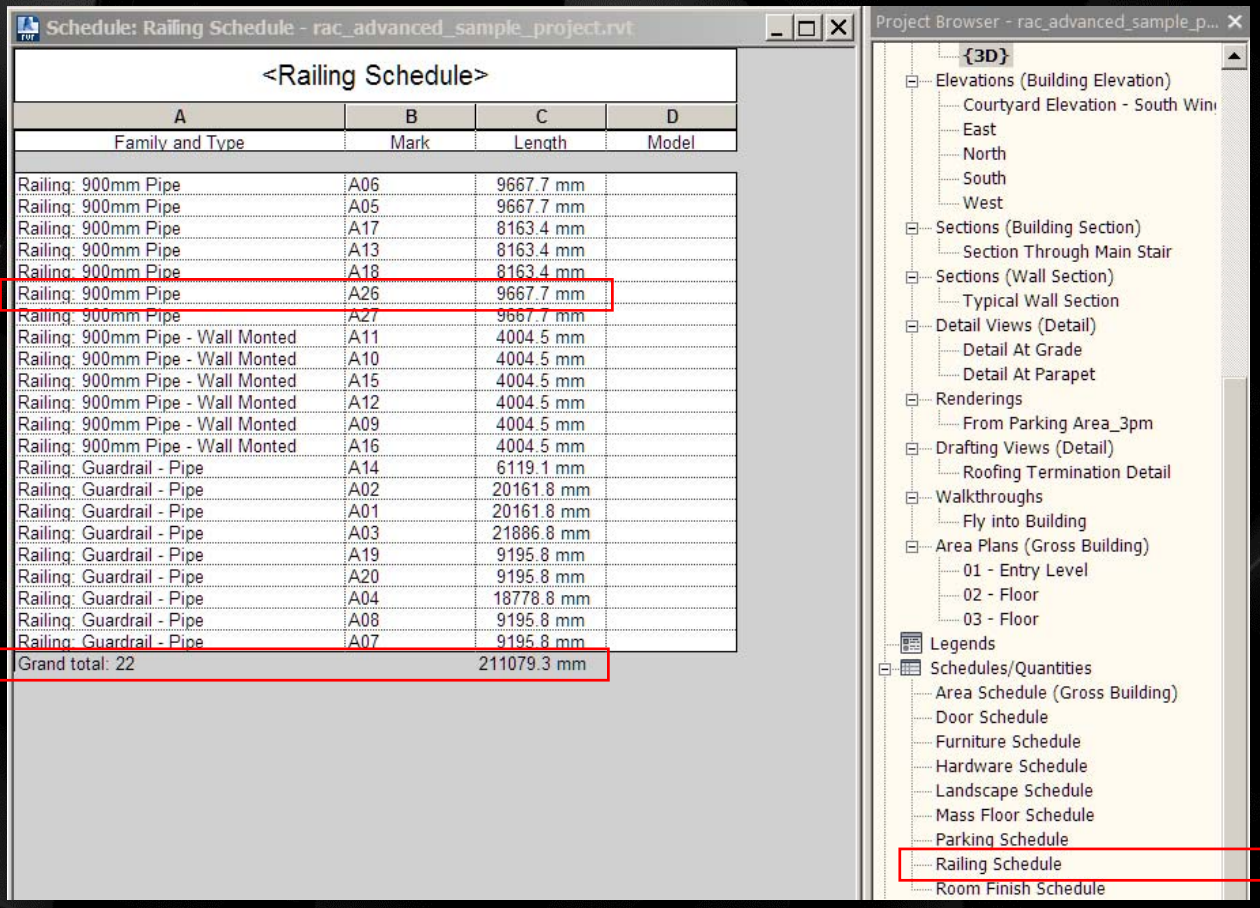
4.0 Deliverables of the Family Library

4.2 Parametric data in family本地化信息



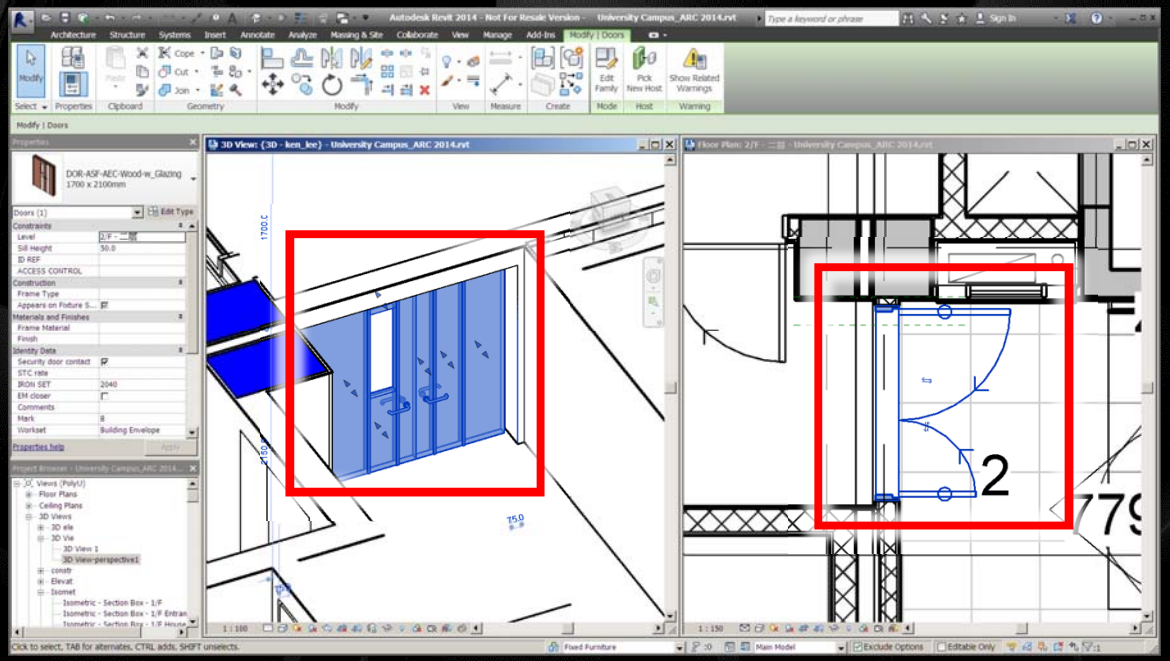
4.0 Deliverables of the Family Library

4.3 Parametric data shown in schedule本地化信息



4.0 Deliverables of the Family Library

4.4 Family in Project Leve中本地化信息應用



5.0 Application of the Family

5.1 Demonstration of the Family application

Demonstration of the Family application .avi

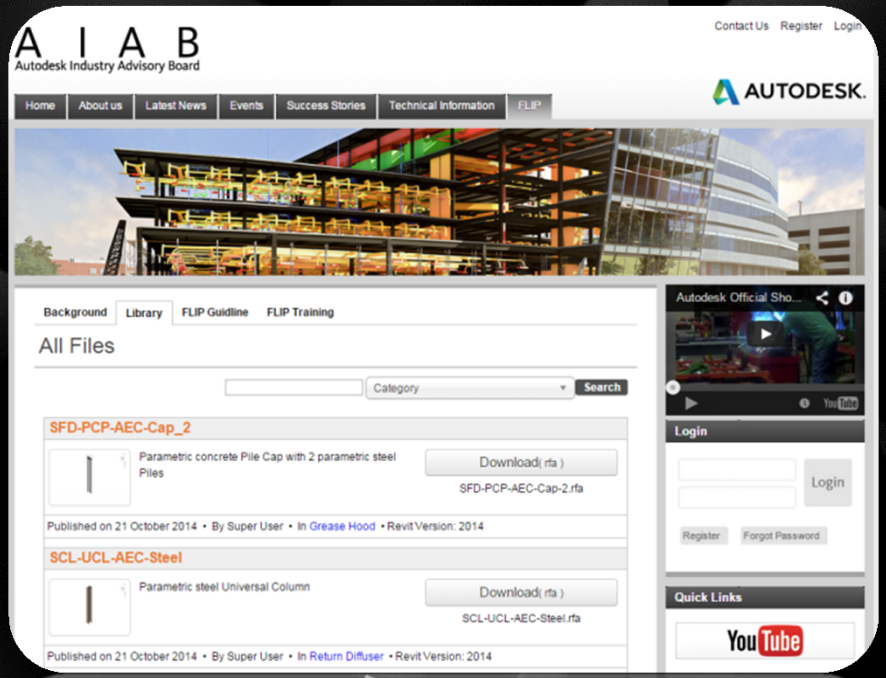
6.0 Launching of F.L.I.P.

建築信息模型族庫交換計劃

1. Background

1.2 What is FLIP?

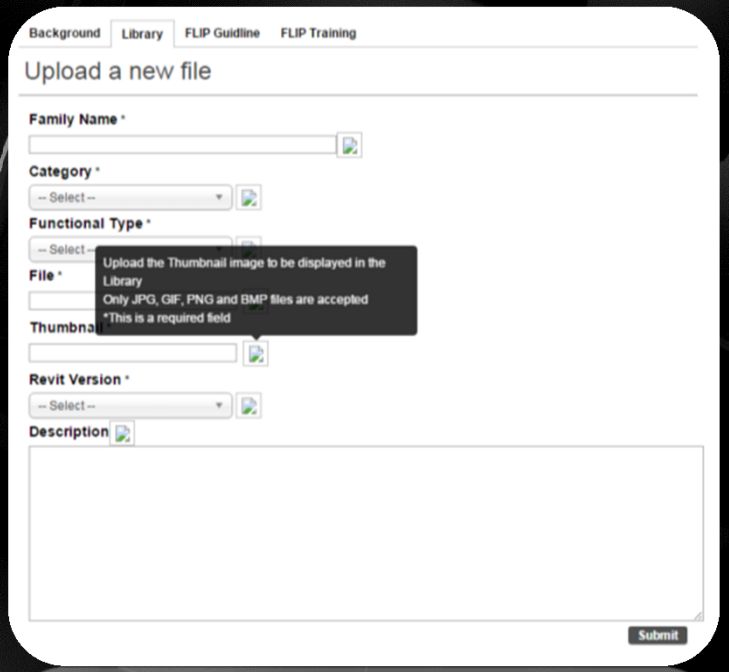
Family Library Interchange Program (FLIP) is a web service (under webpage of AIAB) that allows designers - architects, engineers, construction professionals - to search and find manufacturer-specific or generic building products and associated design content. This content could include 3D models, 2D drawings, and specifications.

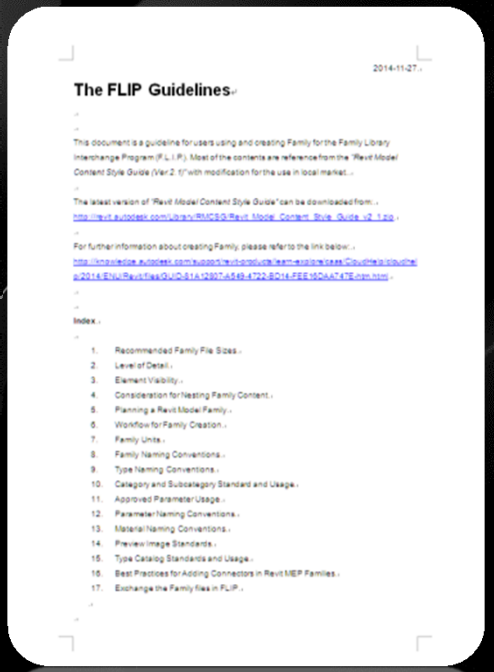


2. Accessing FLIP

2.1 Mechanism of Family exchange

Any Family being uploaded by users will be reviewed by the BIM professionals of the FLIP. If the uploaded Family complies the standard suggested by the FLIP Guideline, the Family will be marked as “FLIP Approved” .





6.0 Launching of F.L.I.P.

6.1.1 A.I.A.B. webpage: Introduction and guidelines

Background

It has been a while that the Building Information Modeling (BIM) is used in the industry. BIM models are shared within project teams during the design and construction process. As-built BIM models are often required by building owners so that information about the building can be retrieved by the operators. To ensure the consistency flow of information, a well-organized set of information is needed so that everyone in the project team can understand and use the information in the BIM model efficiently. Most of the information (such as building components data, schedules and quantity) in the BIM model is generated from Families, therefore it is important to identify what information is needed in a Family and in which stage of the project.

Localized Data

The default Revit templates and Family library may bot wholly tally with the local standards and practices. Our aim is to organize localized contents to reduce ndividual effort in the industry to repeat the localization process so as to adopt BIM in a more efficient way.

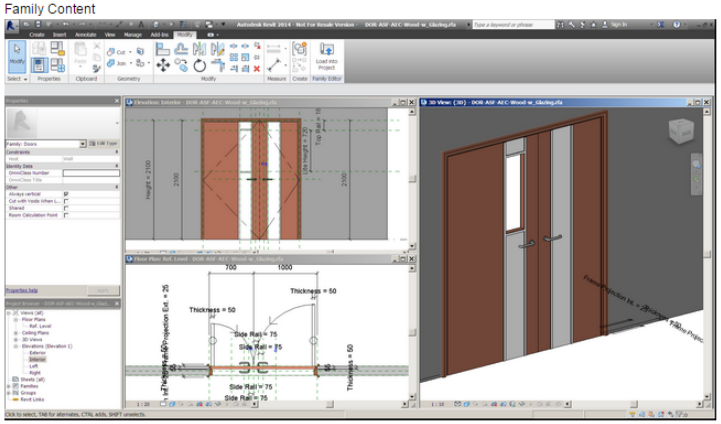
FLIP

Family Library Interchange Program (FLIP) is the collaboration between **Autodesk Far East Ltd** and local BIM Consultant **Advanced Consultation Information Development Ltd (A.C.I.D.)** and **Synnex Technology International (HK) Ltd.**

It is a well-organized web-based platform that standardized and localized Families are stored and categorized according to strict guidelines. Naming convention, styles, level of details and parametric properties are systematically organized according to local practices.

It is an interactive platform that facilitates and encourages Revit users to share and exchange organized families to enhance productivity as a whole. Users can download the guideline on how to build Families, assign Parameters and Level of Development (LOD).

Family Content



6.0 Launching of F.L.I.P.

6.1.2 A.I.A.B. webpage: Family for download 下載

6.0 Launching of F.L.I.P. 發報與分享

6.1.3 A.I.A.B. webpage: Sharing of Family 上傳

6.0 Launching of F.L.I.P.

6.2 Project launch date: 推廣

Phase 1 : **Nov 2014**

30 Families (15 Architectural Families + 15 Structural Families)

Phase 2 : **Feb 2015**

30 Families (15 Architectural Families + 15 MEP Families)

Phase 3 : **May 2015**

30 Families (10 Architectural Families + 20 MEP Families)

F.L.I.P. 建築信息模型族庫交換計劃

1 建立**本地化，**行業**標準化**建築信息模型**族庫**。

2 鼓勵全建築行業**參與**，F.L.I.P. 互動互助計劃，提高生產效率。

3 舉行 F.L.I.P. **推廣**計劃，展示 F.L.I.P.

4 舉辦族群**培訓課程**， 培養本地人才。

3. Demonstration Session

Title:	AIAB Master Class - Demo of FLIP project for Revit users
Descriptions:	Speaker will demonstrate and explain the logic of the FLIP project
Date:	17 Dec 2014 (WED)
Time:	19:00 – 20:30
Venue:	Rm Z405 The Hong Kong Polytechnic University

4. Training Session

Title:	ACID Master Class – How to make a Family for FLIP
Descriptions:	Tutor will provide training to participants for making a Revit Family suitable for FLIP
Date:	12 Jan 2015 (MON)
Time:	09:00 – 17:00
Venue:	BIM Studio, Rm A2 35/F TML Square, 3 Hoi Shing Rd, Tsuen Wan

4. Training Session

4.1 Course Content

1. Recommended Family File Sizes
2. Level of Detail
3. Element Visibility
4. Consideration for Nesting Family Content
5. Planning a Revit Model Family
6. Workflow for Family Creation
7. Family Units
8. Family Naming Conventions
9. Type Naming Conventions
10. Category and Subcategory Standard and Usage
11. Approved Parameter Usage
12. Parameter Naming Conventions
13. Material Naming Conventions
14. Preview Image Standards
15. Type Catalog Standards and Usage
16. Best Practices for Adding Connectors in Revit MEP Families
17. Exchange the Family files in FLIP

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BIM courses

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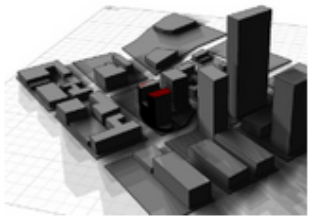
All Courses | Now Available

[CEI] CEI Basic (Revit)



read more

Duration:	8 hours
Instructor:	David Fung
Award:	Certificate of Completion CEI Basic (Revit)
Date:	2015-01-02
Time:	09:00 - 17:00
Venue:	BIM Studio

[CEII-A] CEII Architecture (Revit)

Recent News

AIAB Master Class – Demo of the FLIP project for Revit users
December 8, 2014

- Thank You -