

Practical Application of BIM in NIKKEN SEKKEI 日建設計におけるBIMの実践

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What is Nikken Sekkei?

Company Introduction

Awards

3 of Nikken's projects have been shortlisted for WAF Awards 2011



OVERSEAS AWARDS

- ✓ 1993 AIA Honour Award
- ✓ American Architecture Award
- ✓ Cityscape Architectural Review Awards
- ✓ Design For Asia Award
- ✓ IABSE Outstanding Structure Award
- ✓ International Illumination Design Awards
- ✓ Monument of the Millennium
- ✓ The Annual Business Week / Architectural Record Award
- ✓ World Architecture Festival Awards

- ✓ AIA Guam and Micronesia Achievement Award
- ✓ ARCASIA AWARDS
- ✓ DuPont Benedectus Awards
- ✓ FIP Award
- ✓ IALD International Lighting Design Awards
- ✓ MIPIM Asia Award
- ✓ Real Estate Awards 2010
- ✓ World Architecture Award 2001

MAJOR JAPANESE AWARDS

- ✓ AJJ Annual Architectural Design Commendation
- ✓ BCS Award
- ✓ Good Design Award
- ✓ JAAF Award
- ✓ Japan Federation of Architects & Building Engineers Association Award
- ✓ Public Buildings Association Award
- ✓ The Prize of AJJ
- ✓ Urban Design Grand Prize
- ✓ The Best of New Offices

Tokyo Tower



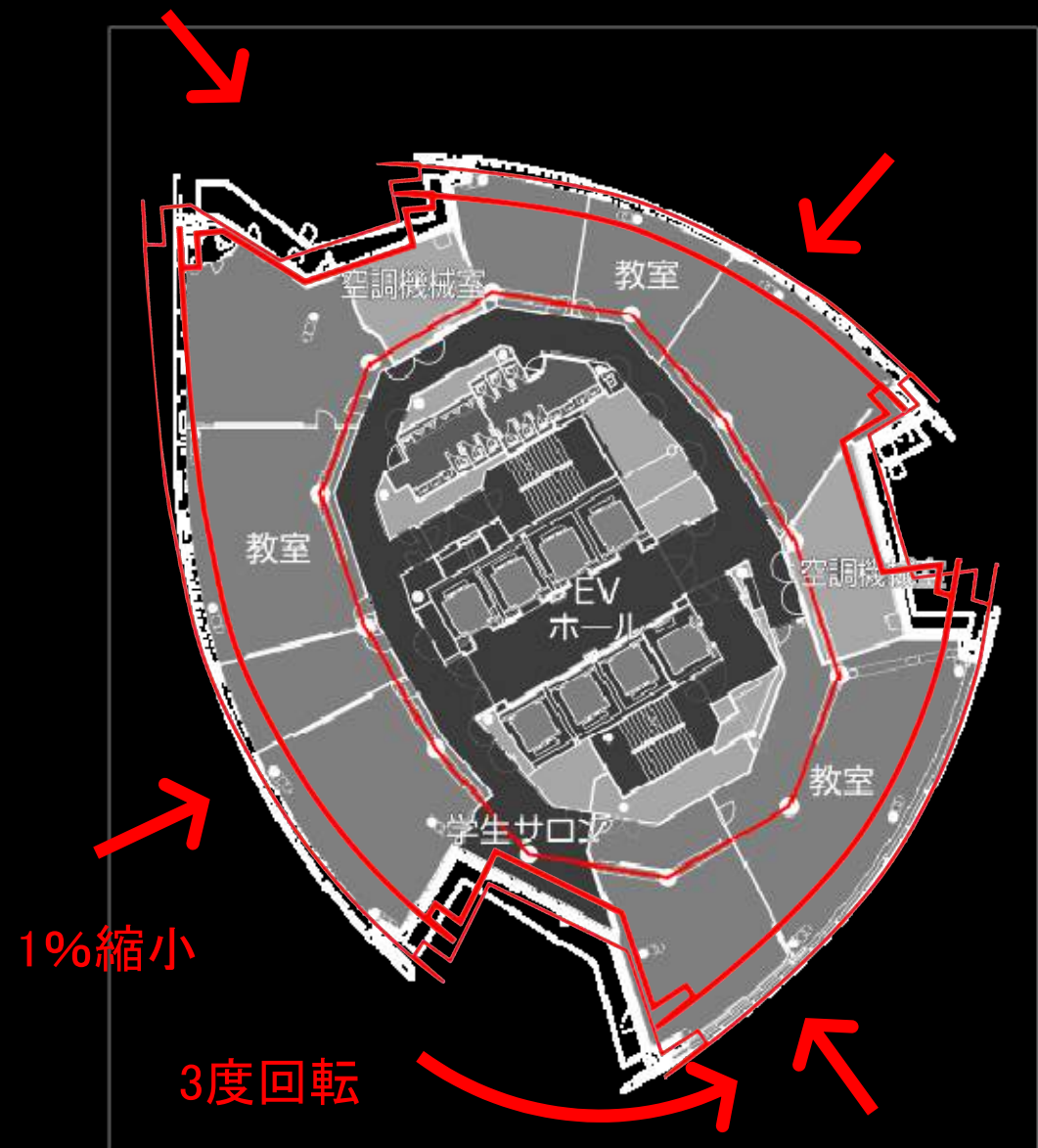
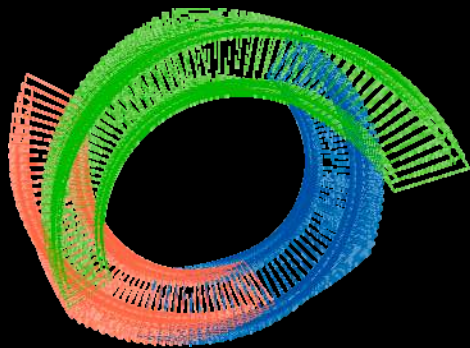
Tokyo Sky Tree

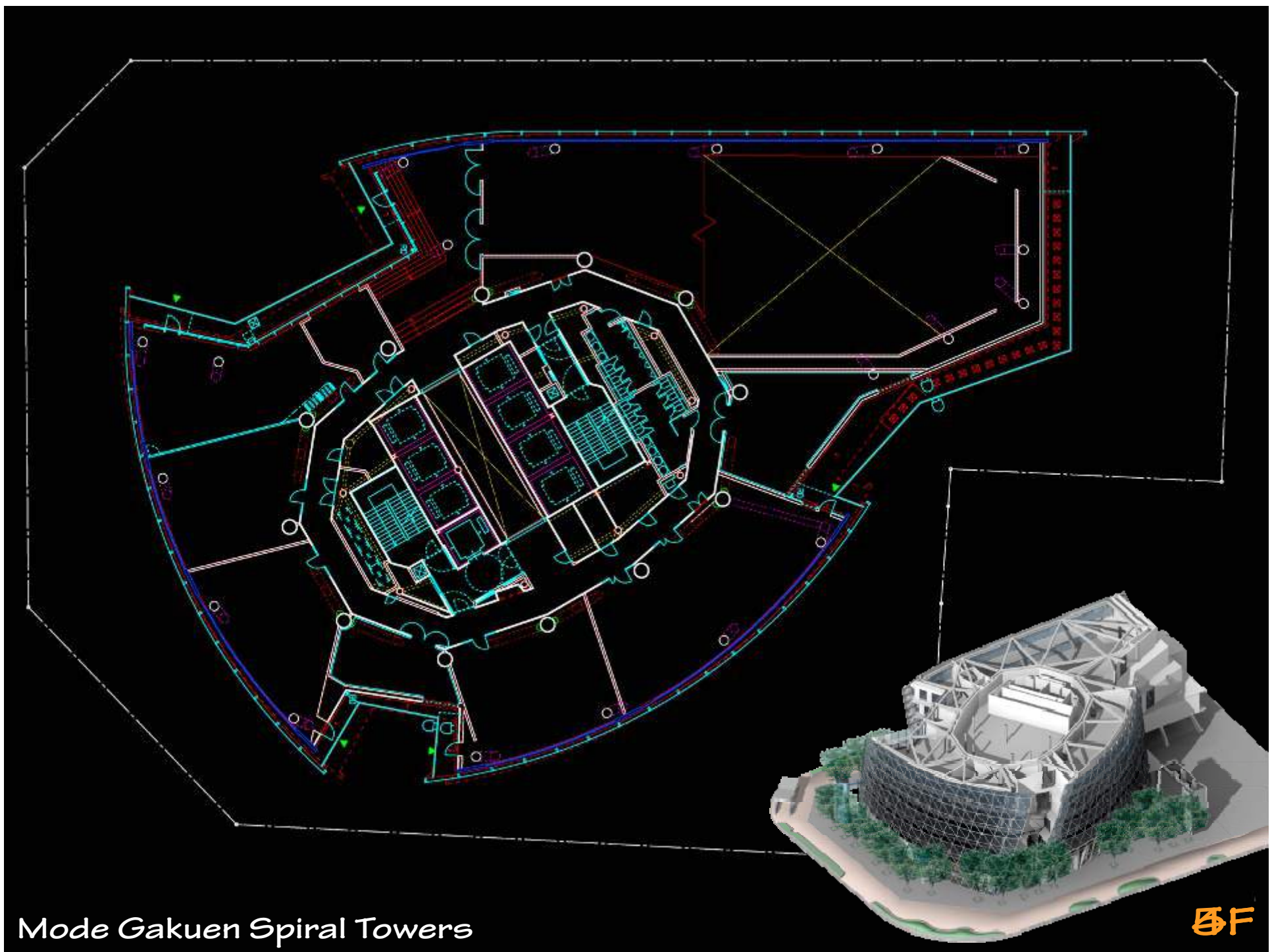


Tokyo Mode Gakuen
Spiral Towers

スパイラルの法則

インナーチューブを軸に
一層上がるごとに
3度回転しながら
1%縮小する





Mode Gakuen Spiral Towers



Nikken Sekkei

Experimental Examination

BIM for productivity
(mass production)



BIM for high quality of design
(mass customization, simulation, multipurpose
optimization, generation)



BIM for life cycle building design



BIM for new building business

BIM for productivity
(mass production)



BIM for high quality of design
(mass customization, simulation, multipurpose
optimization, generation)

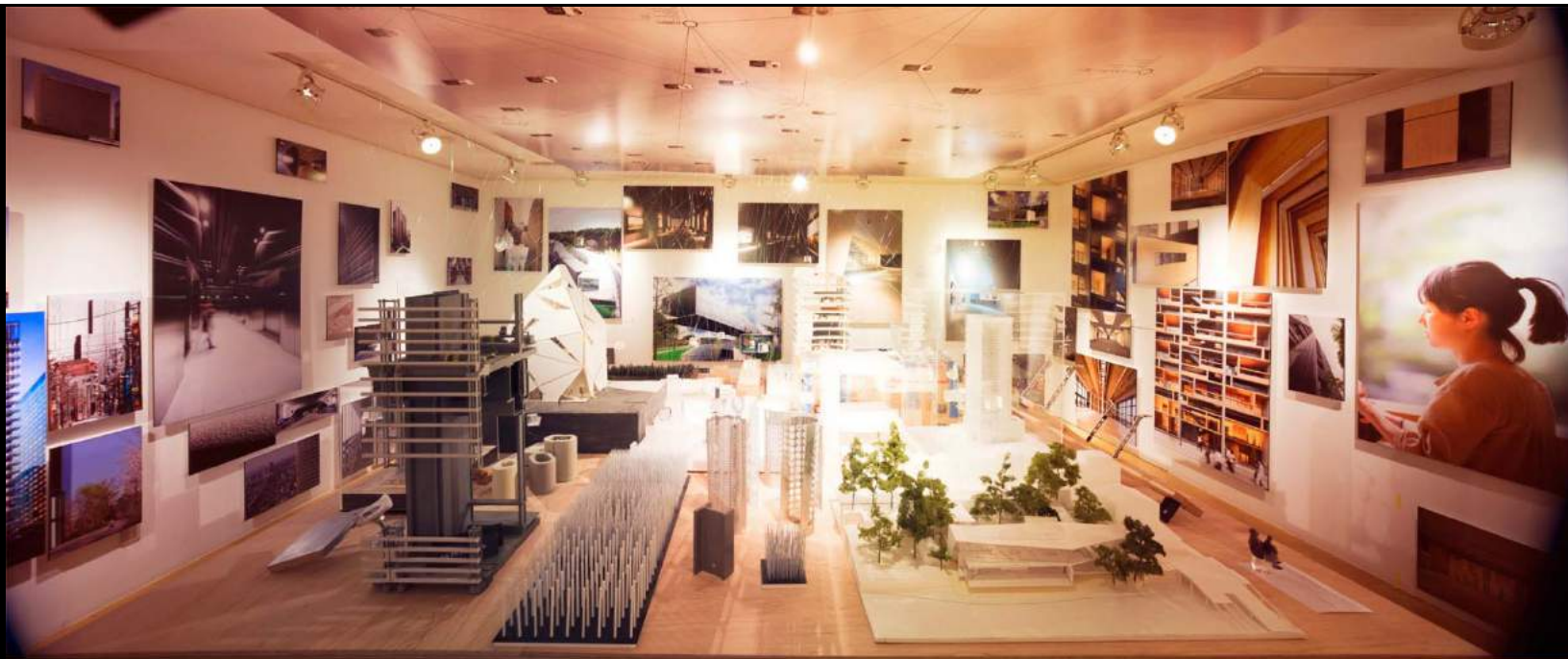


BIM for life cycle building design



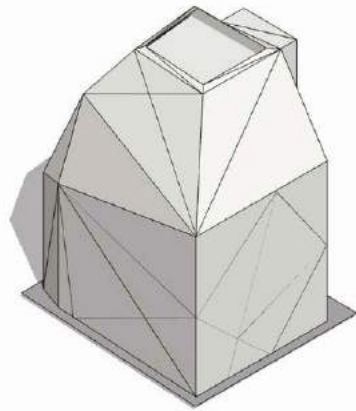
BIM for new building business

The First Step

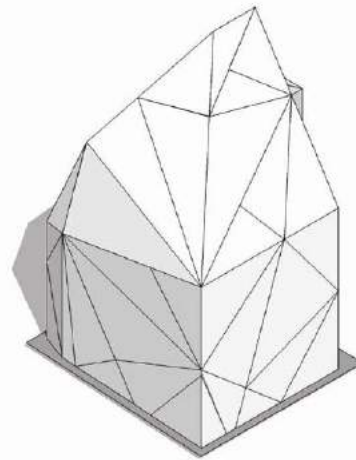




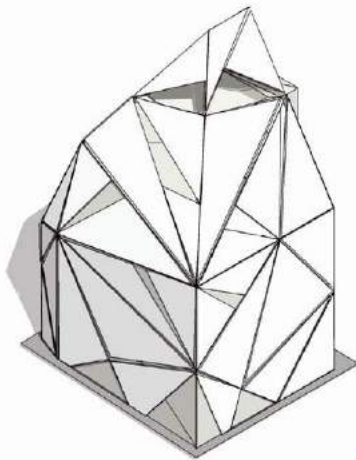
Jimbocho Theater Building
神保町シアタービル



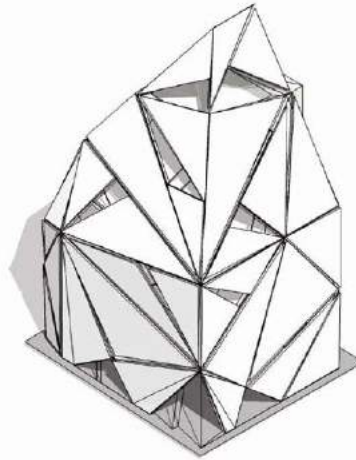
多面体の躯体。



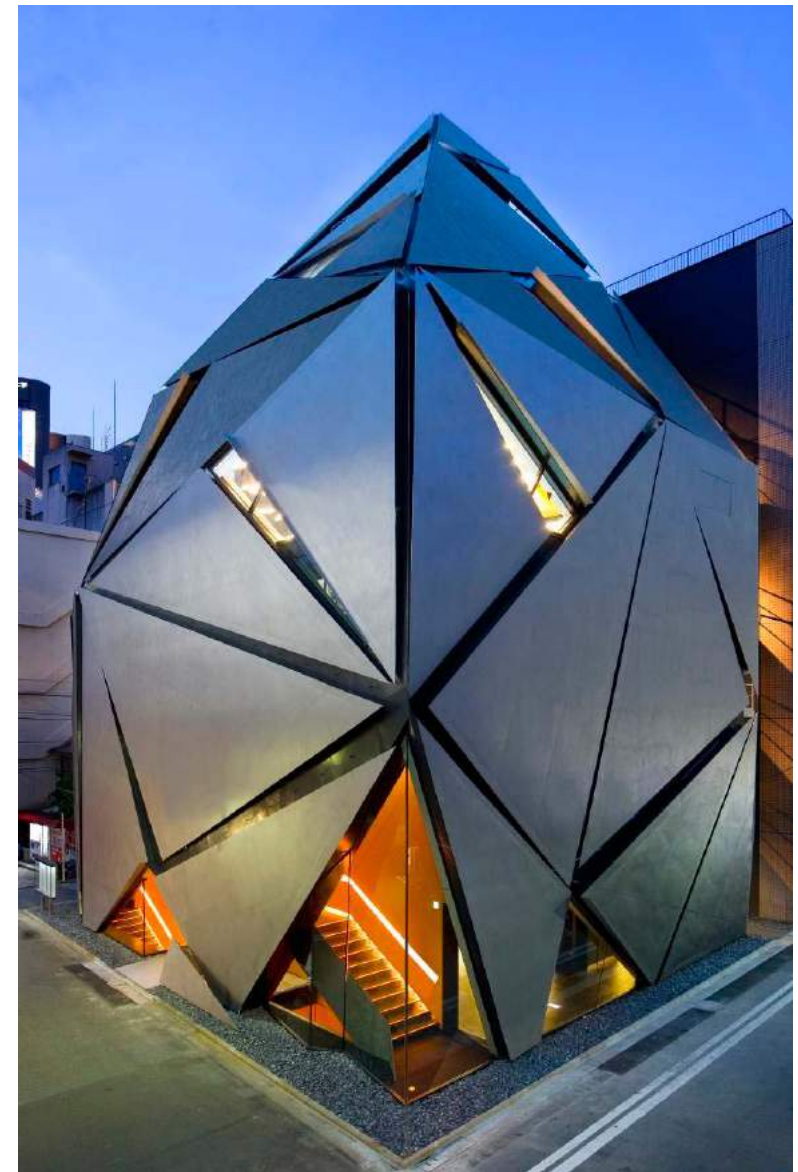
稜線に沿って金属パネルを割り付ける。



この稜線に開口部や樋や水切りとなるスリットを設ける。
開口部はパネルがはがれた部分か、スリットの一部分と位置づけた。



パネルを伝う雨水が確実に溝に落ちるよう各パネルは全てが微妙に異なる傾き方をしている。リアルな要件を抽象化して消してしまうのではなく、それを造形に取り込むことで現実離れたものにしていく。

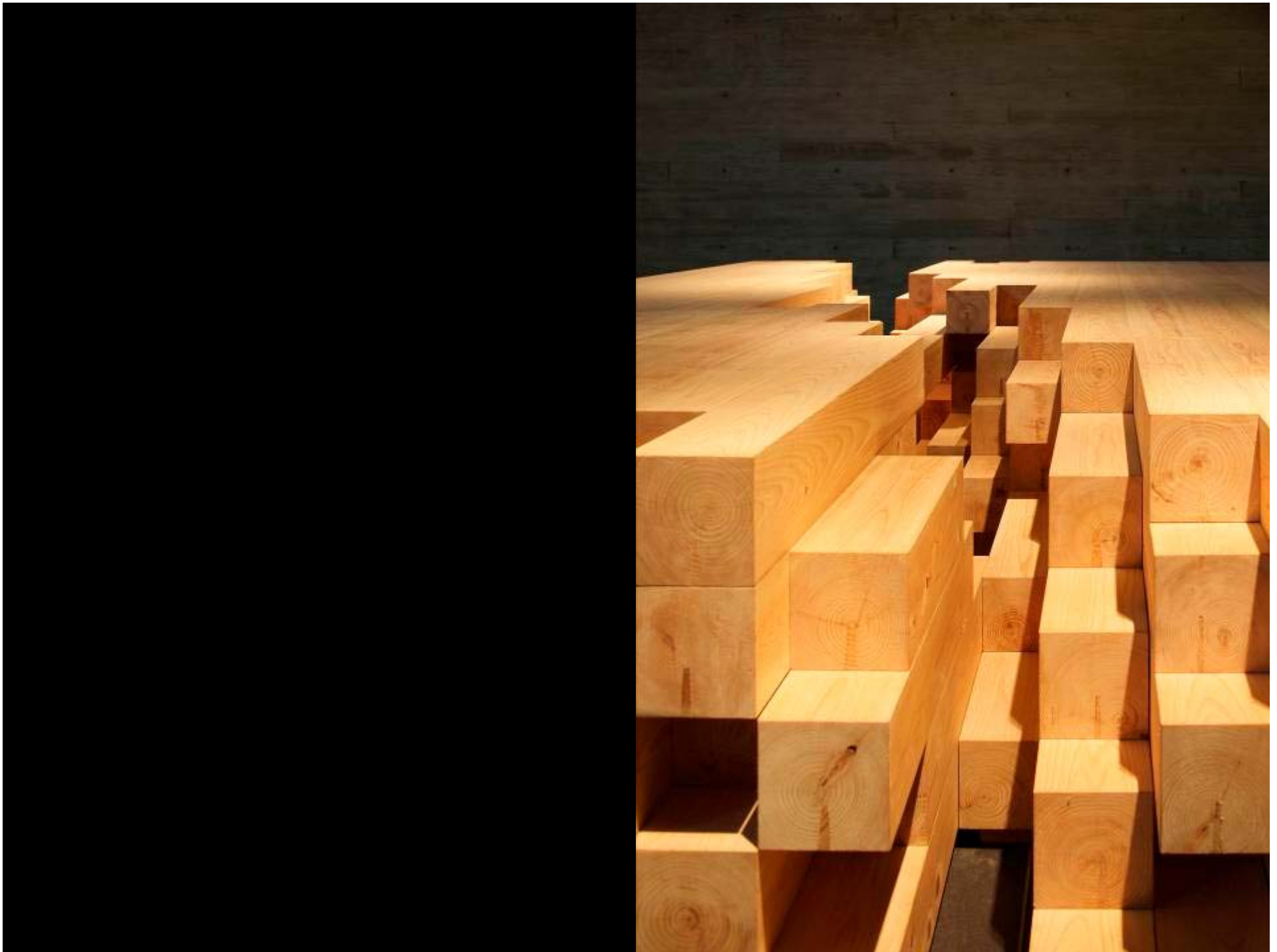


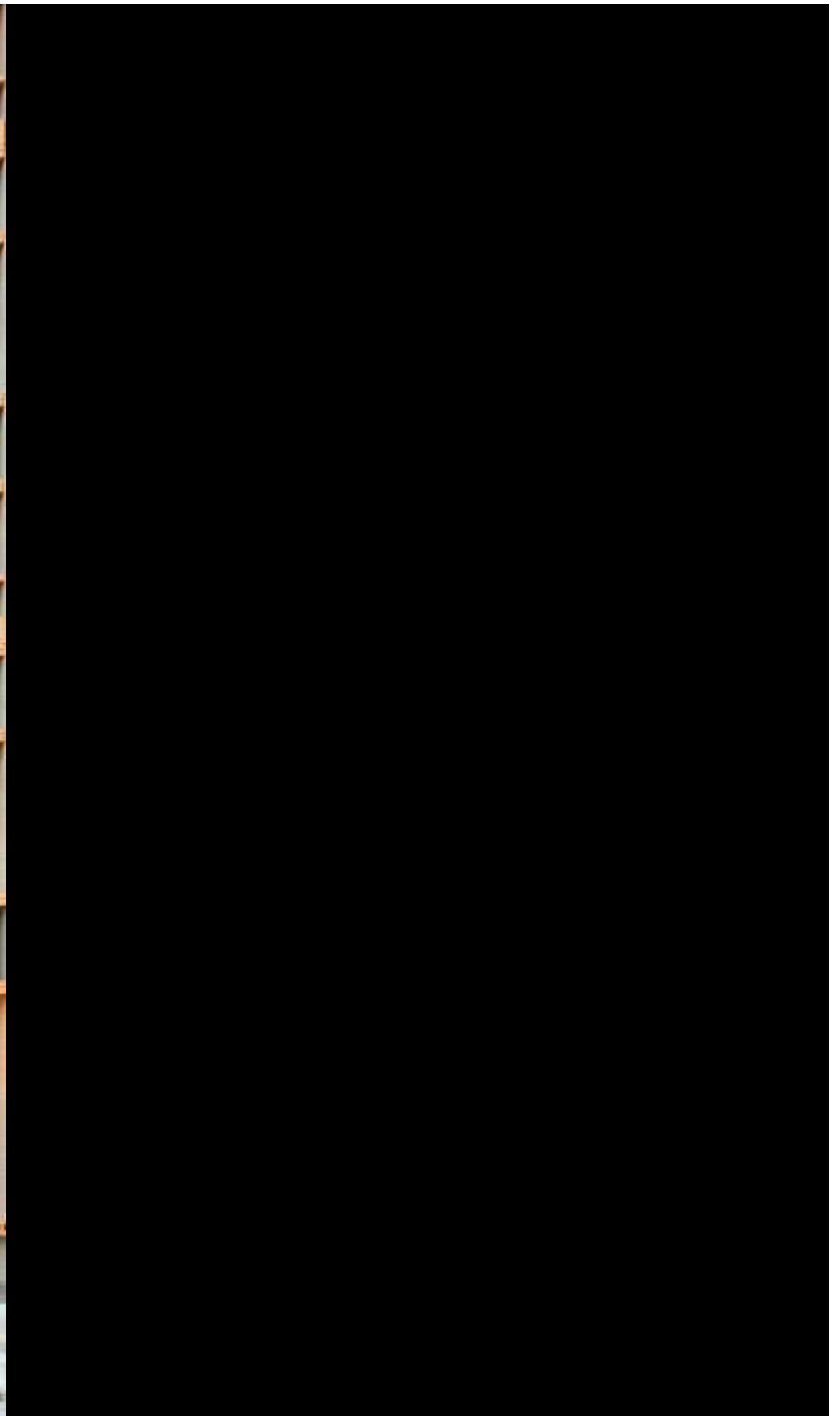
Jimbo-cho Theater Building

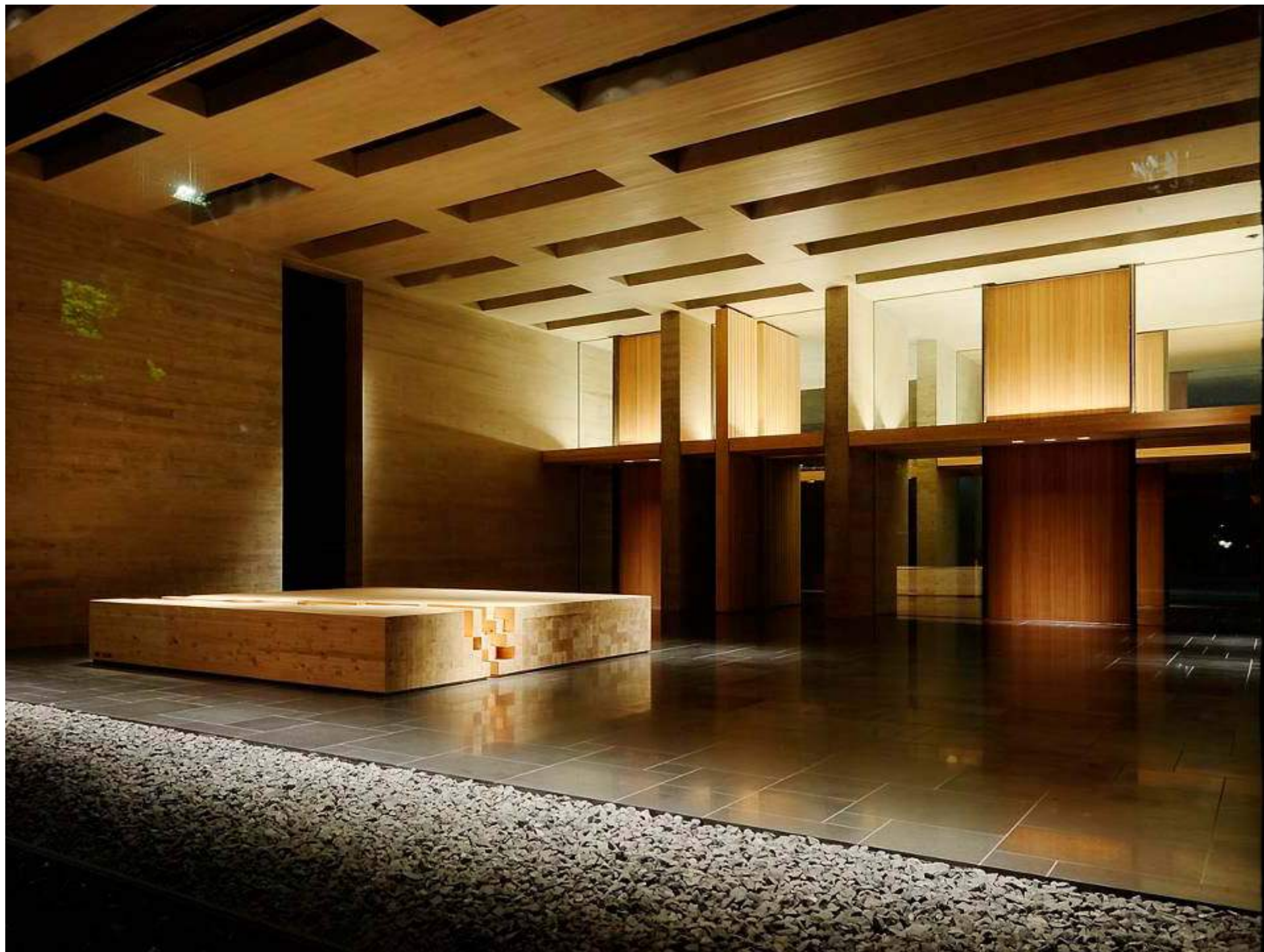
Mokuzai Kaikan

The Headquarters of Lumber Wholesaler Association

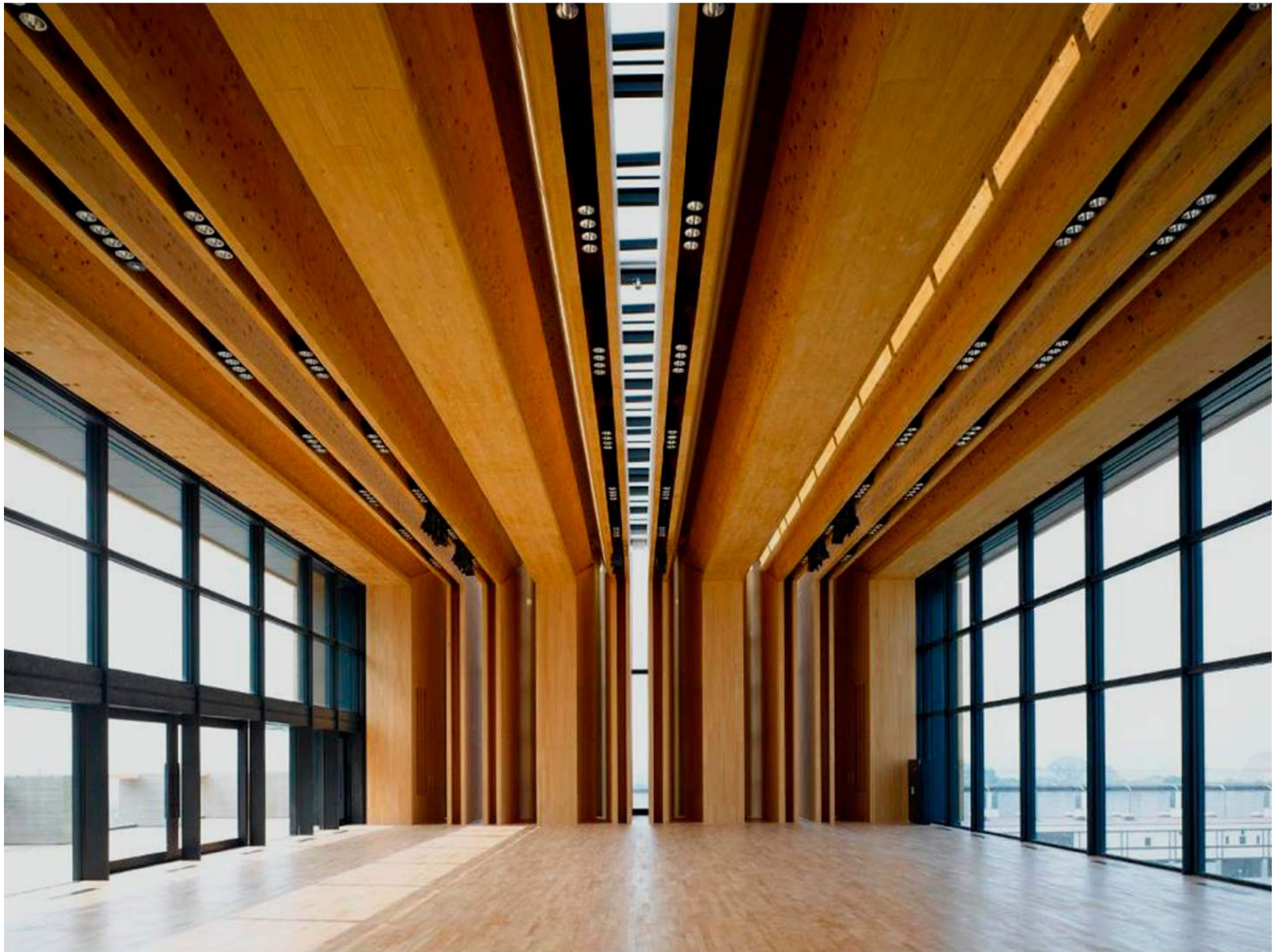












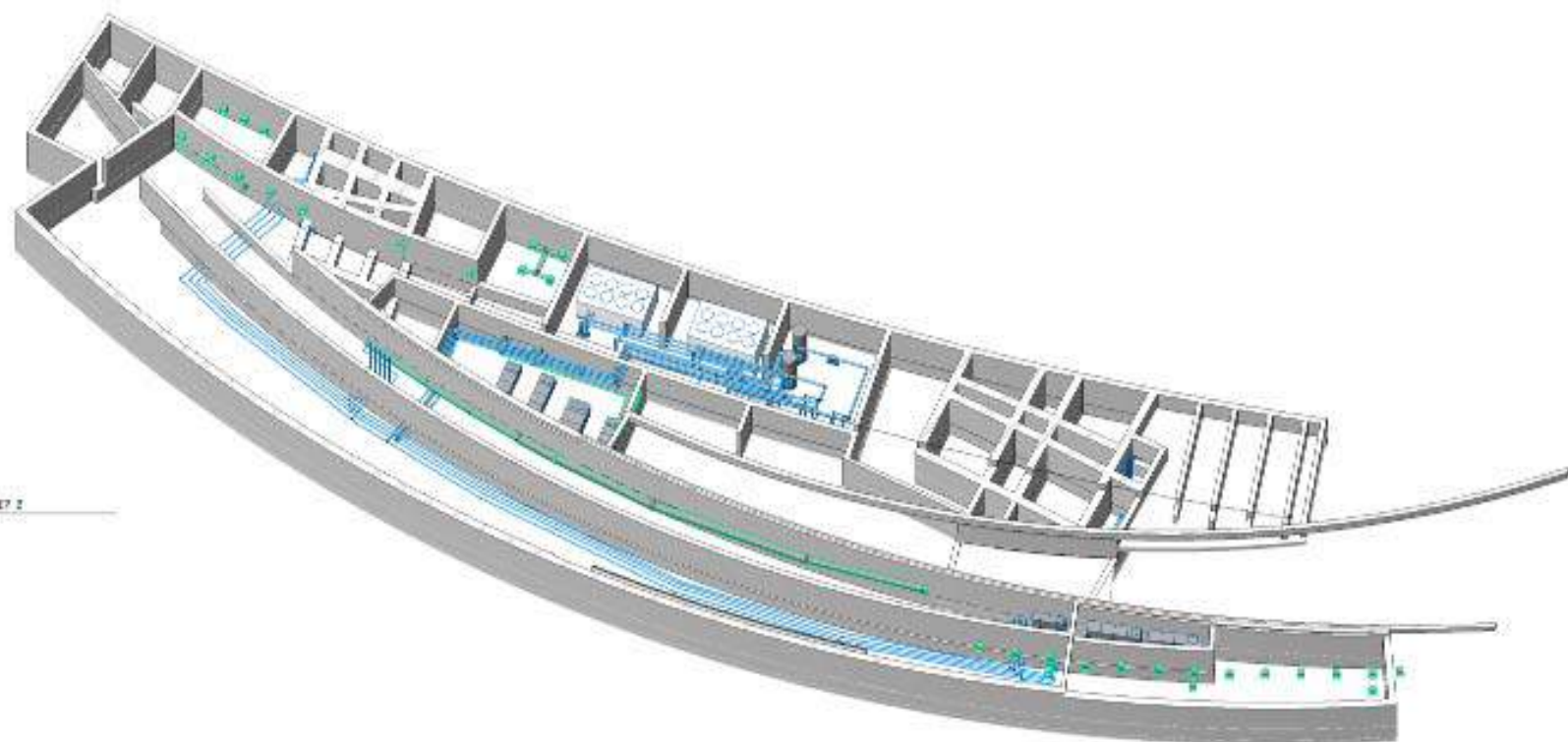


HOKI Museum

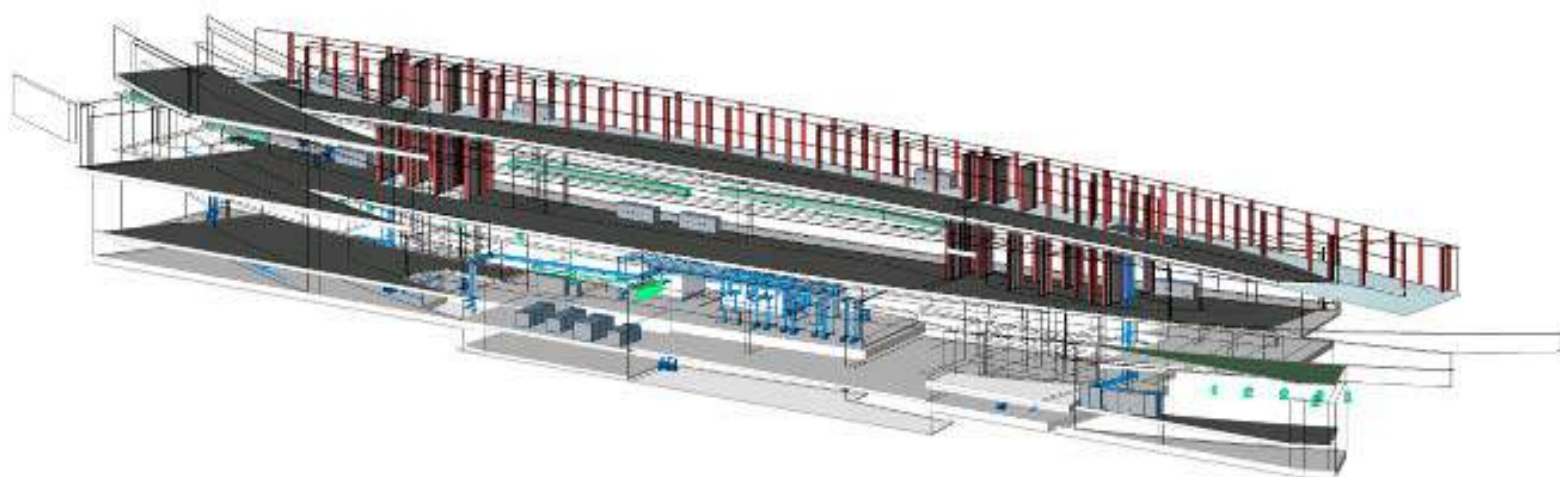




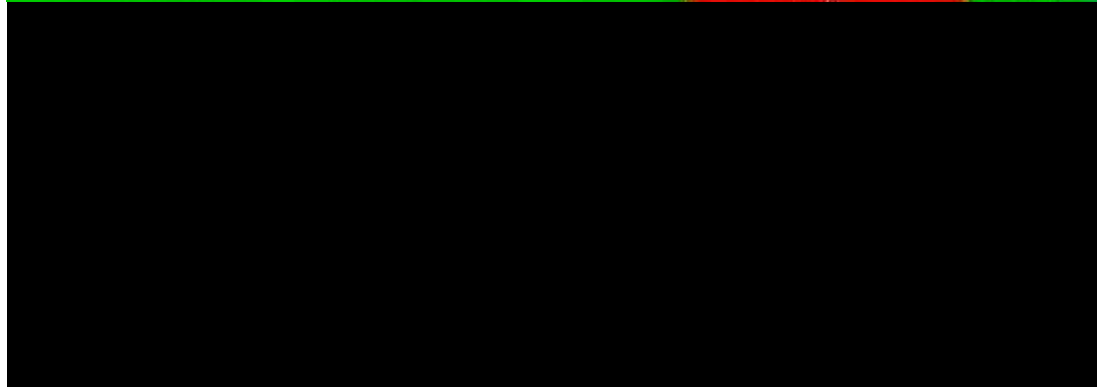
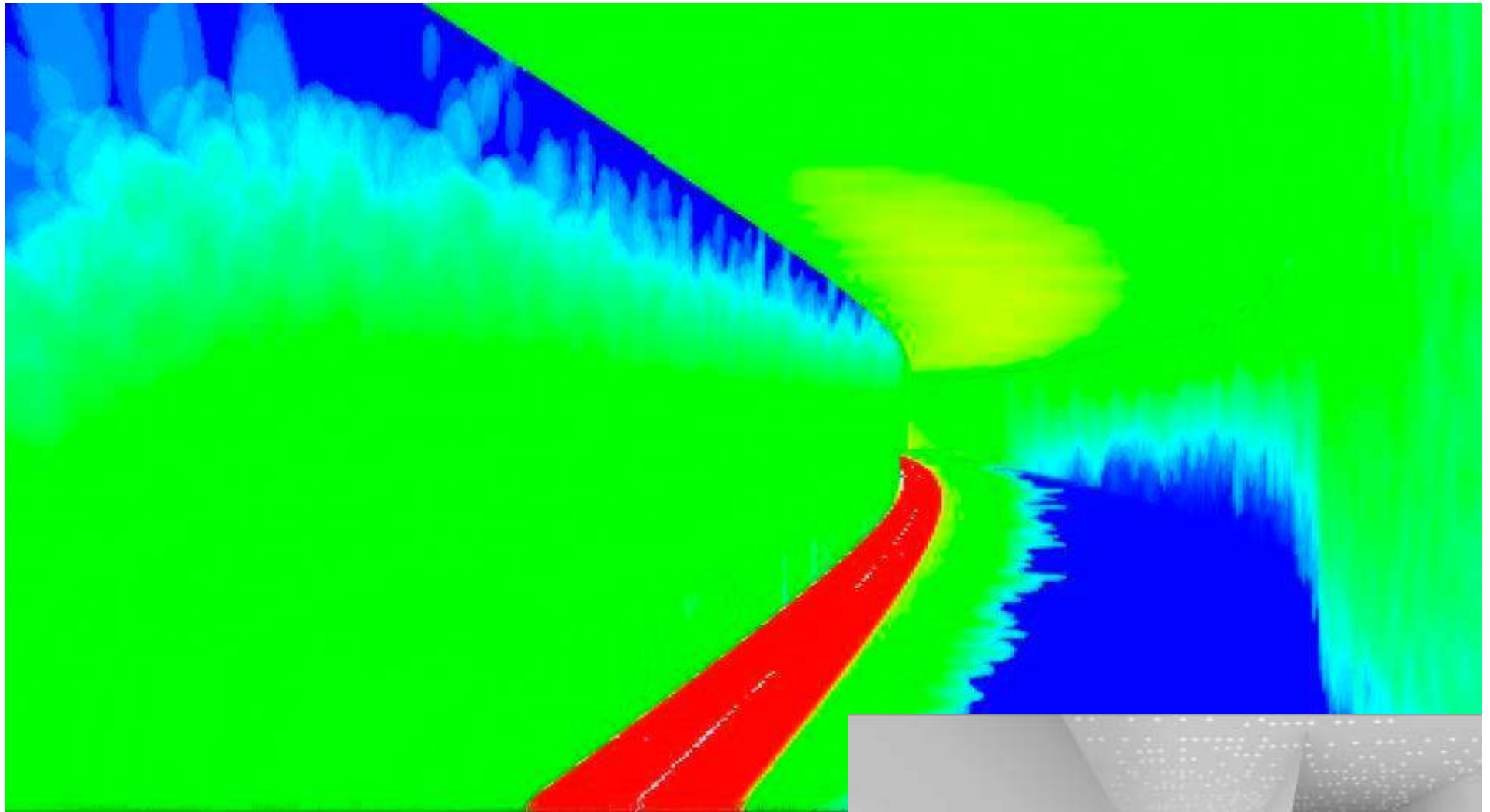
12.07



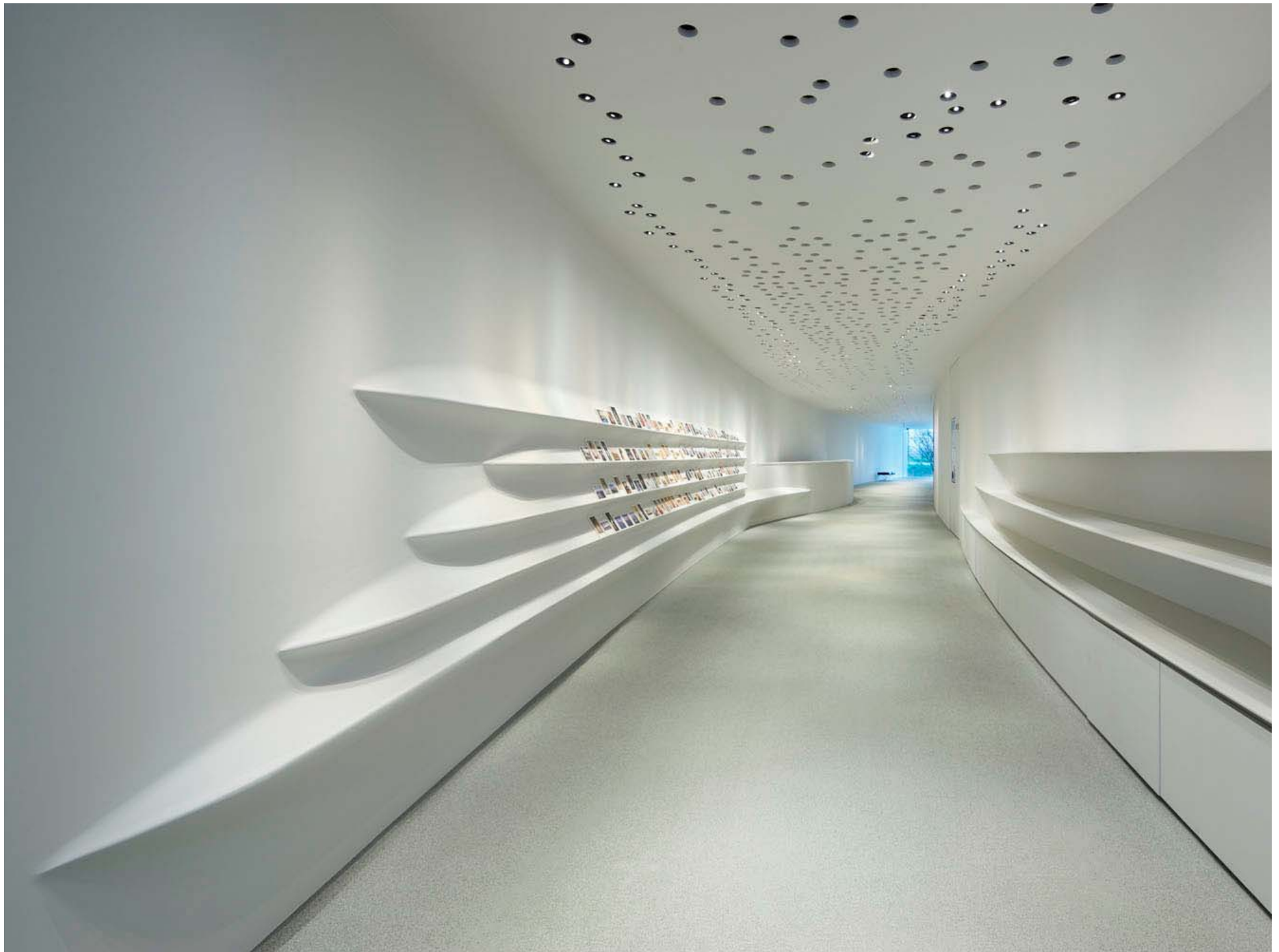
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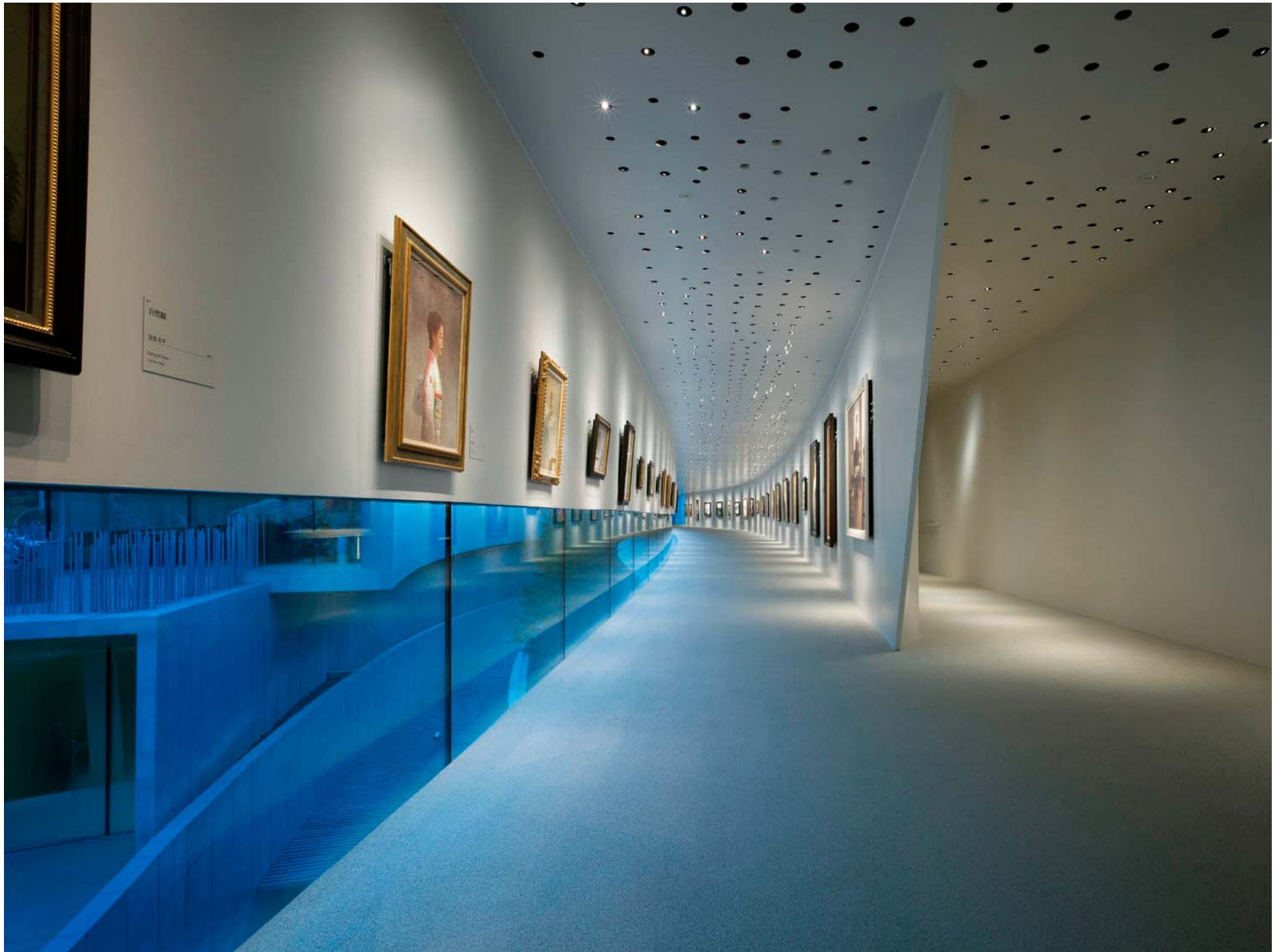






















Sony City Osaki



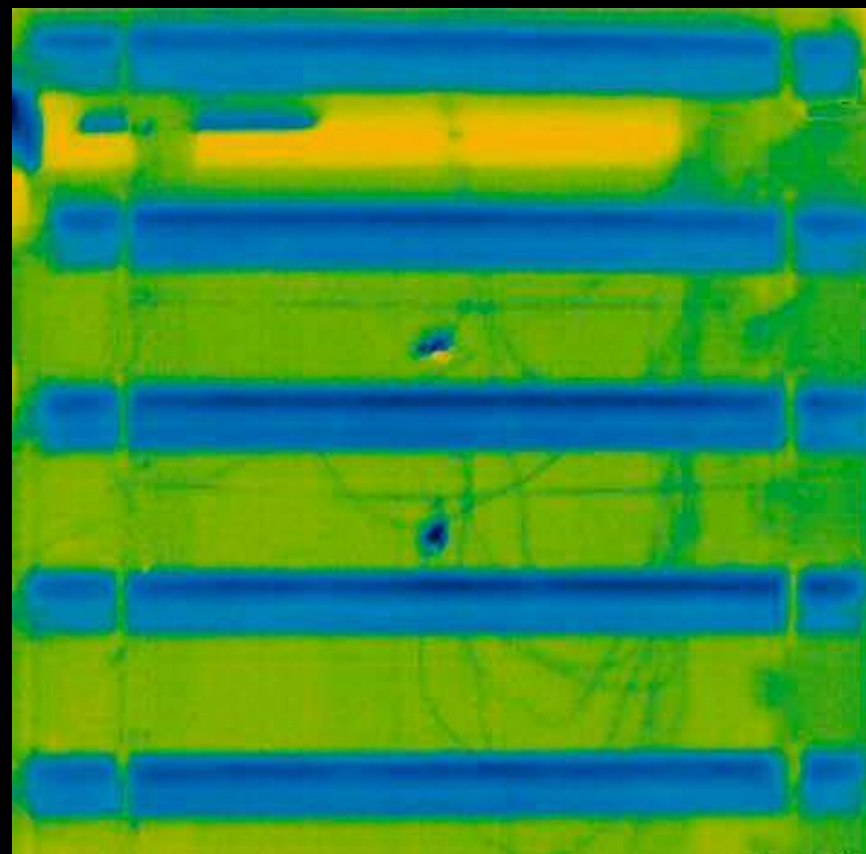






モックアップ実験

30℃ 35℃ 40℃



熱画像

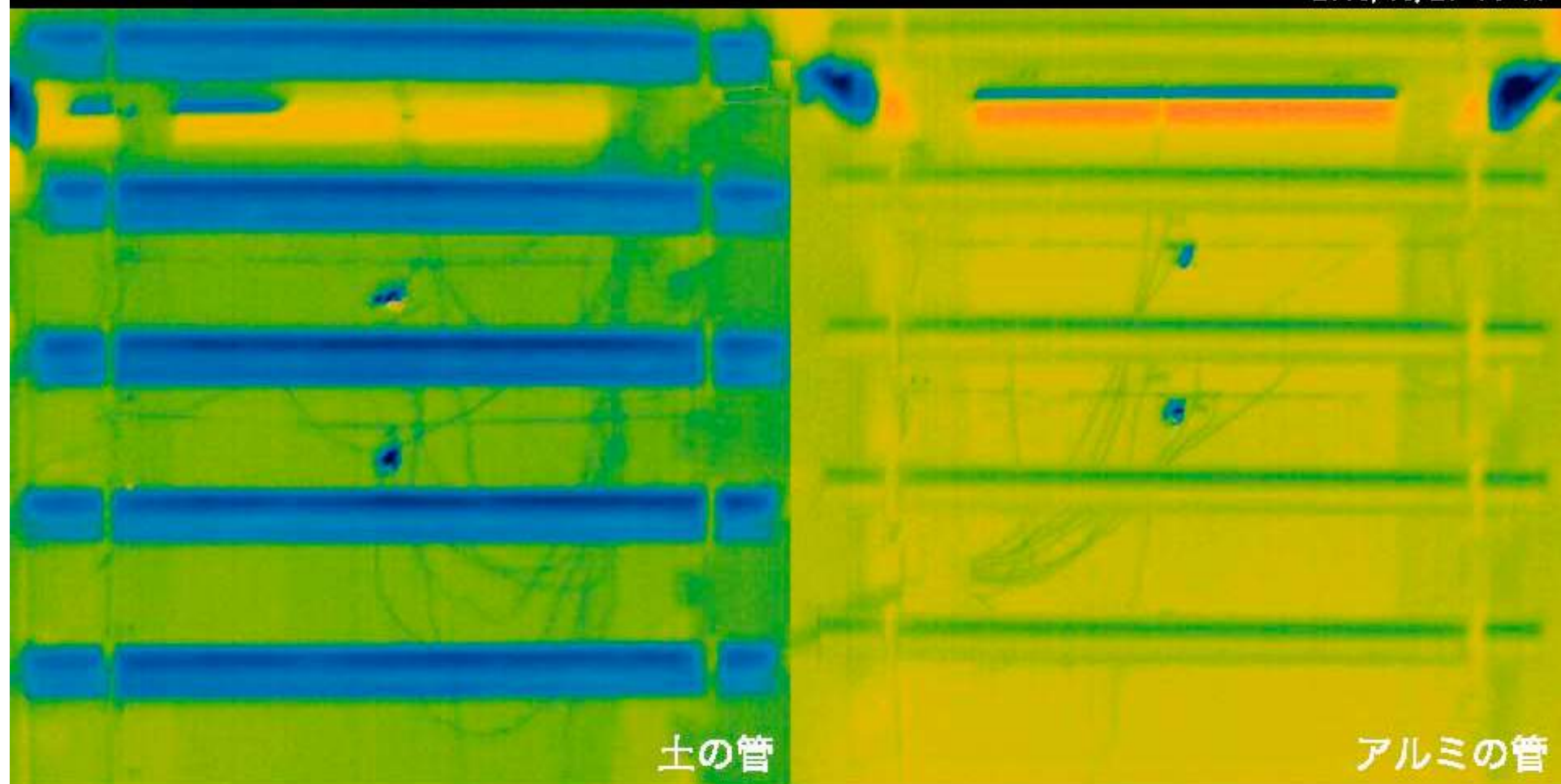
Thermograph 熱画像

30℃

35℃

40℃

2008/08/20 14:00



アルミと比べて表面温度が低くなることが実験により確認された。

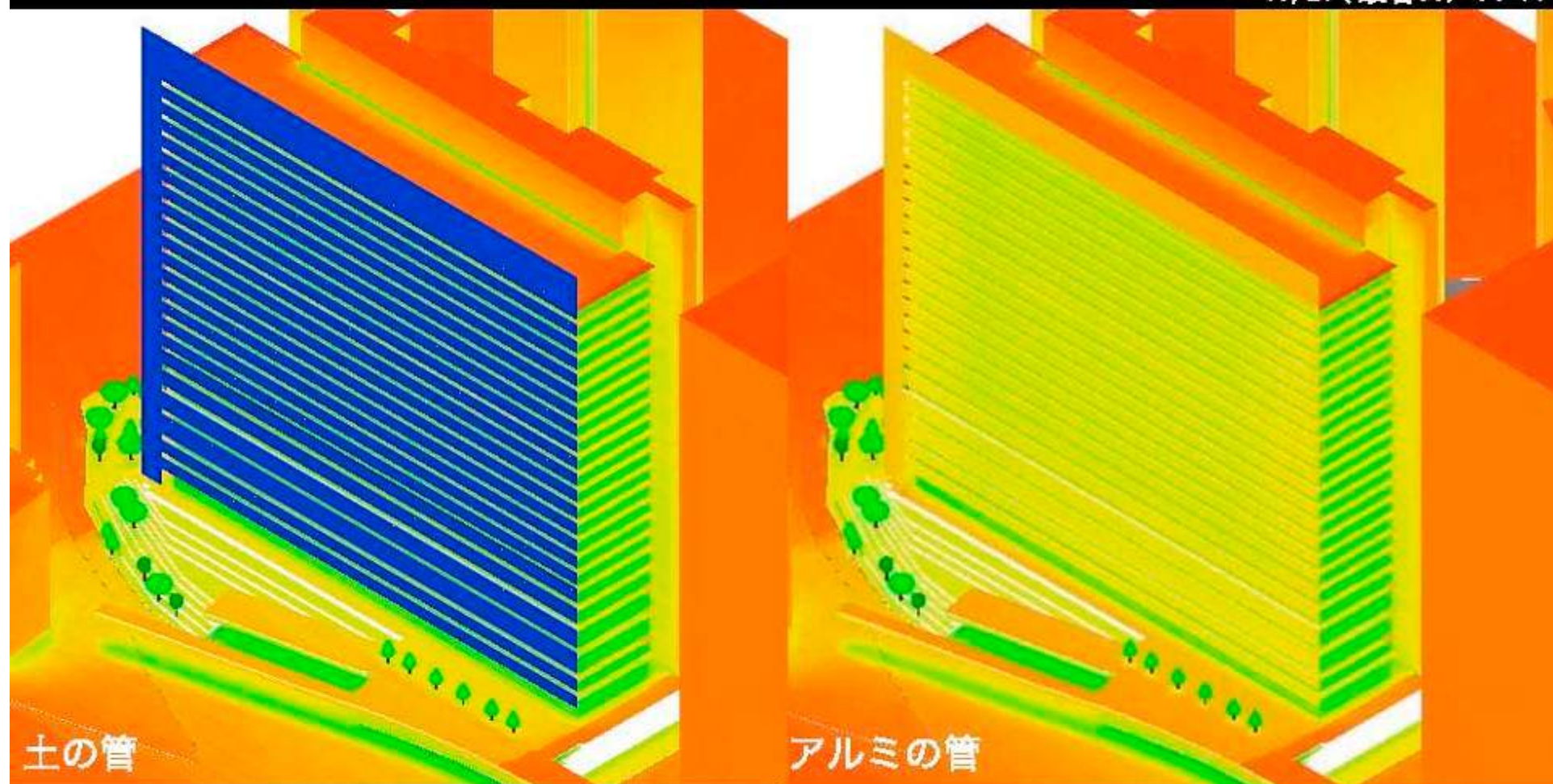
表面温度シミュレーション

20℃

30℃

40℃

07/25 (最暑日) 14:00



最暑日には表面温度がアルミより 10℃程度低くなる。

File : vaio_14時_1364.iFLD

