



STC Engineering & Consulting

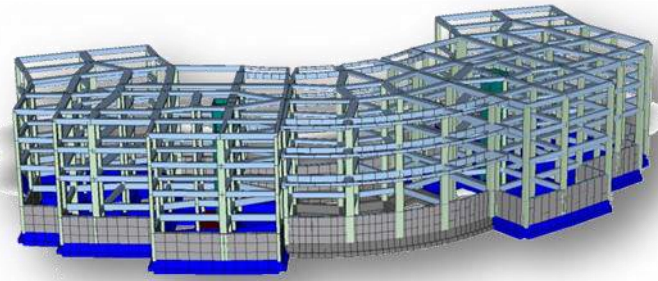
Portfolio 2017

The study STC Engineering & Consulting work in General in the field of civil engineering and Architecture, with particular experience in the areas listed below.

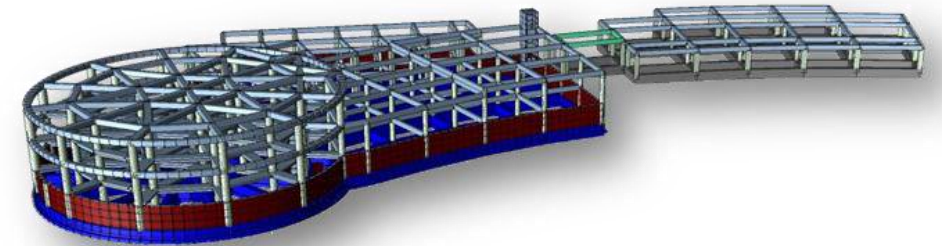
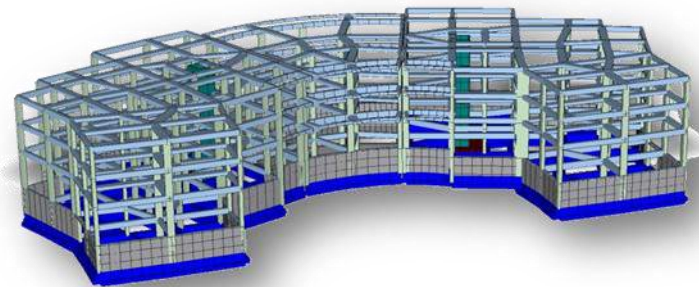
- Structural engineering
- Consolidation and restoration
- Hydraulic engineering, water treatment plants and integrated water cycle
- Geotechnical Engineering
- Structural monitoring and controls
- Energy-saving design
- Energy and environmental design
- Urban design
- Architecture and interior design
- Naval design

STC Engineering & Consulting

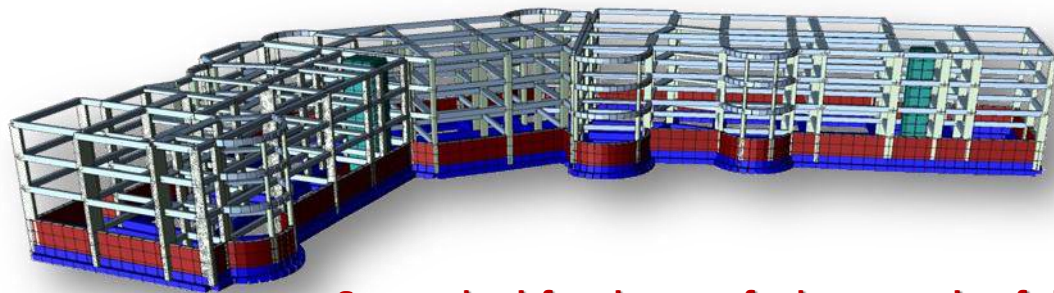
Some jobs....



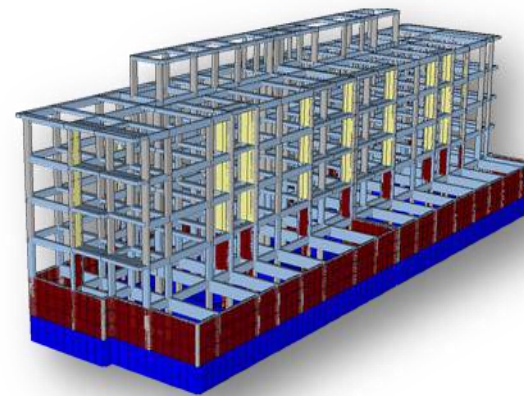
Structure in reinforced concrete for the construction of a Hotel



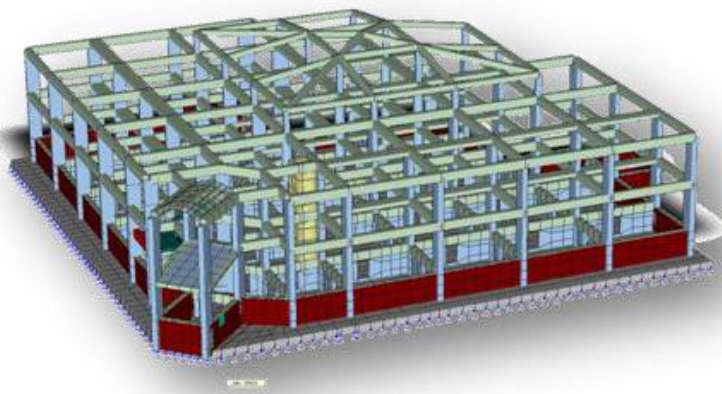
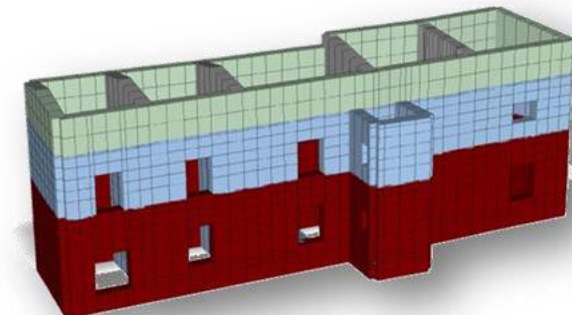
Reinforced concrete structure for bar/restaurant



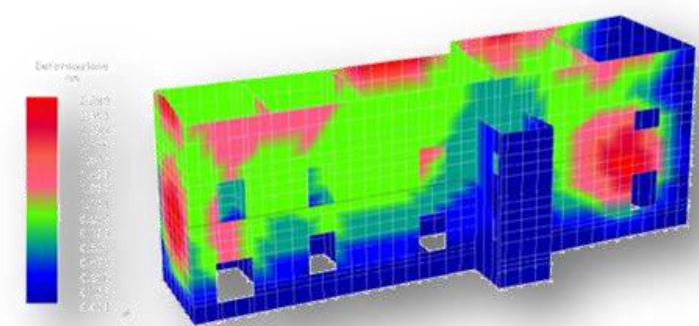
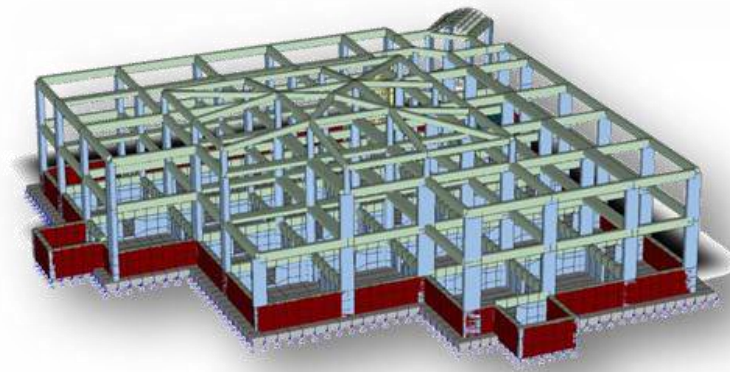
Structure in reinforced concrete for the construction of a hotel



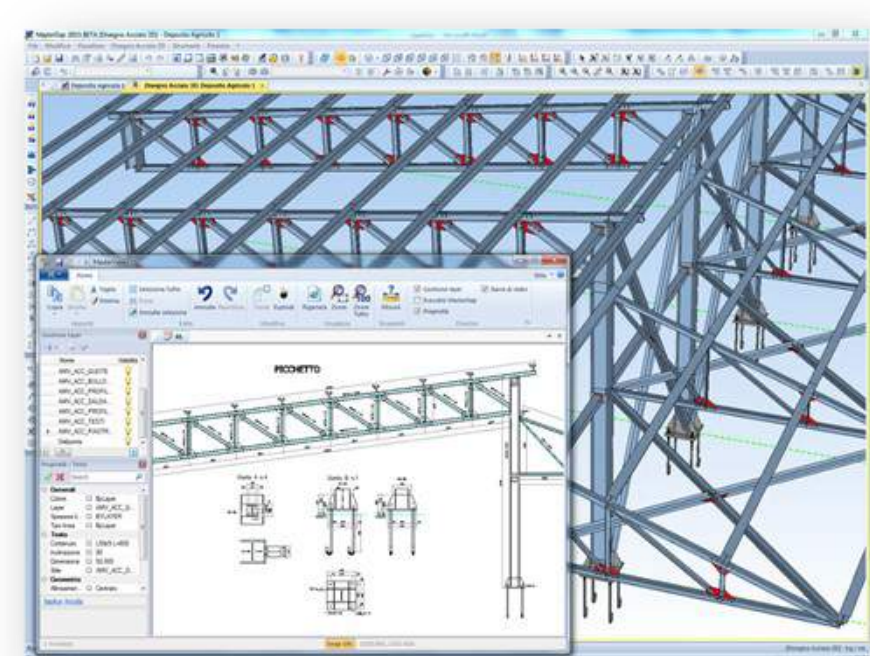
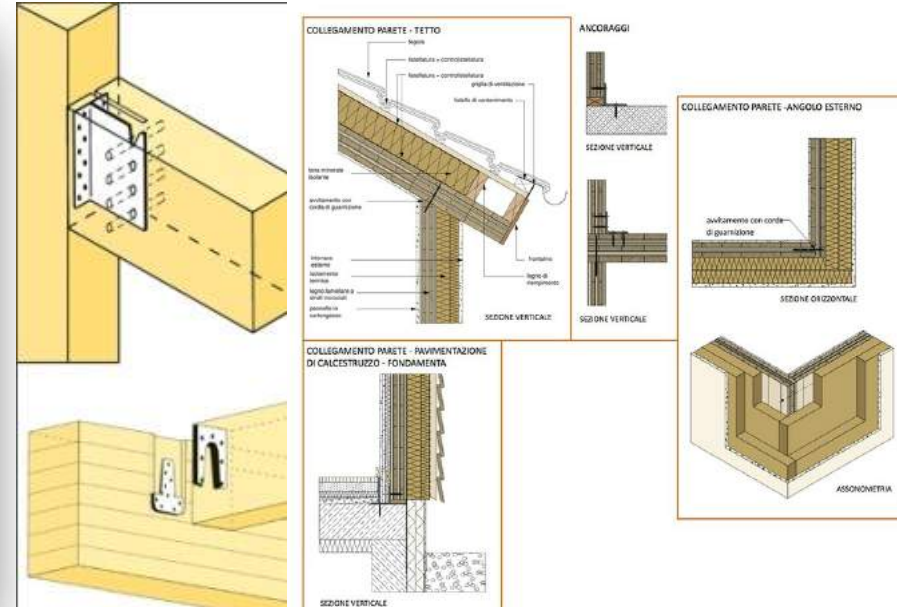
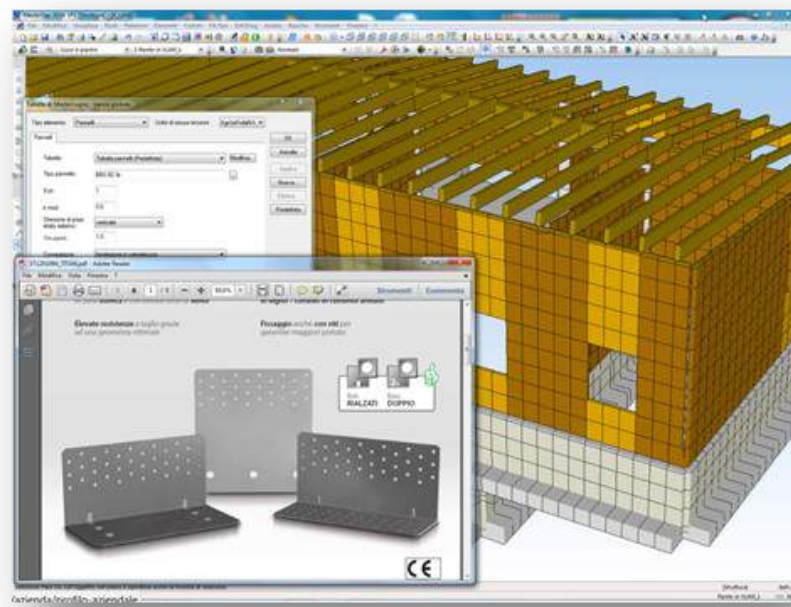
Building for residential applications



Reinforced concrete structure to complete the enlargement of a school building

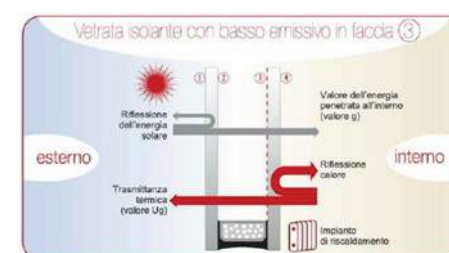
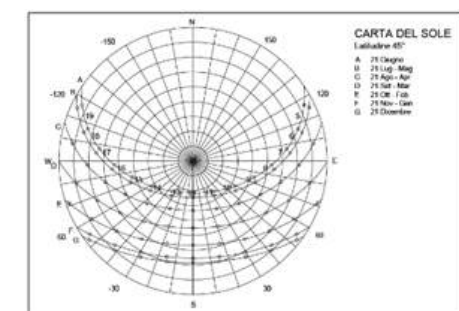
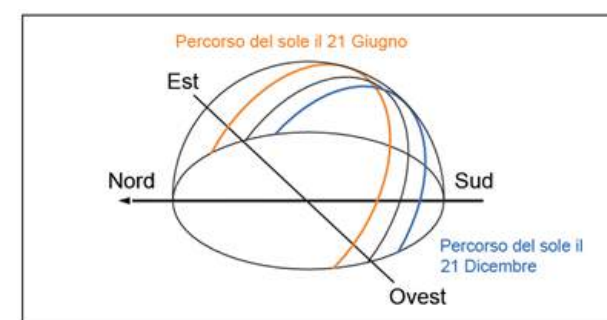
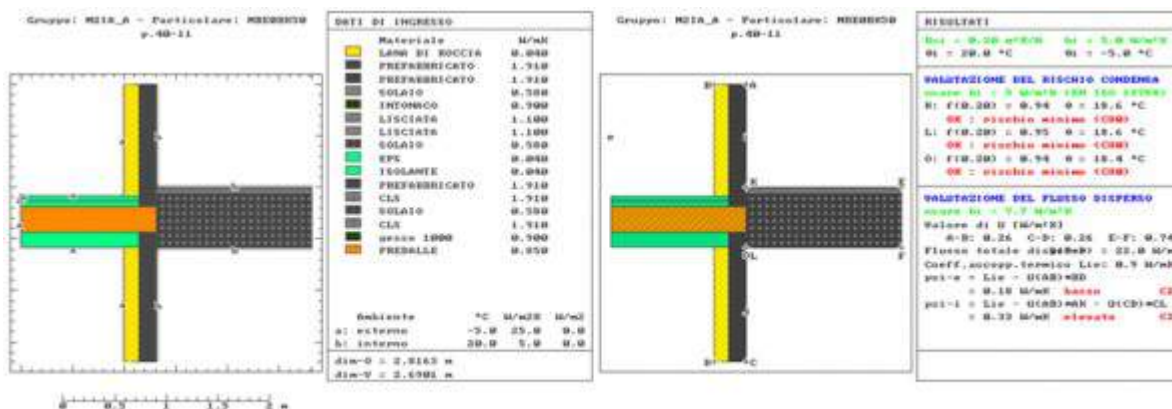


Study of seismic behavior of masonry building

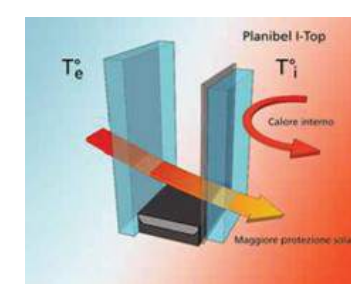
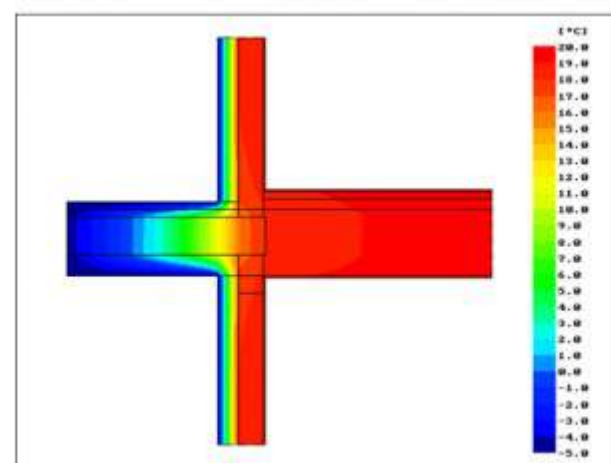


Wooden buildings

Steel buildings



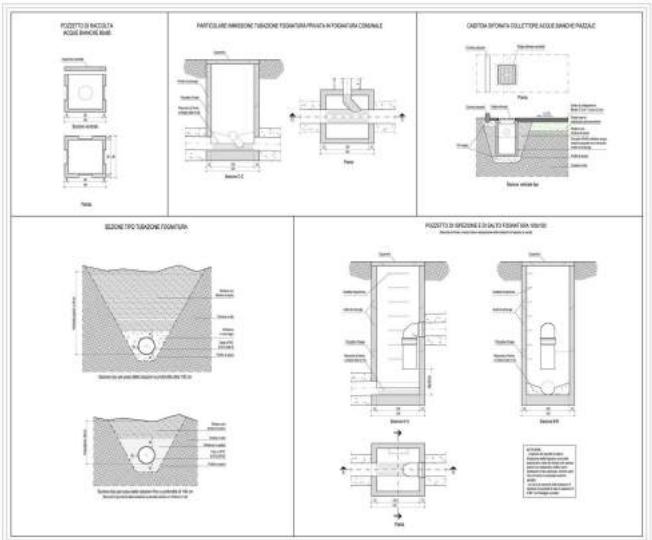
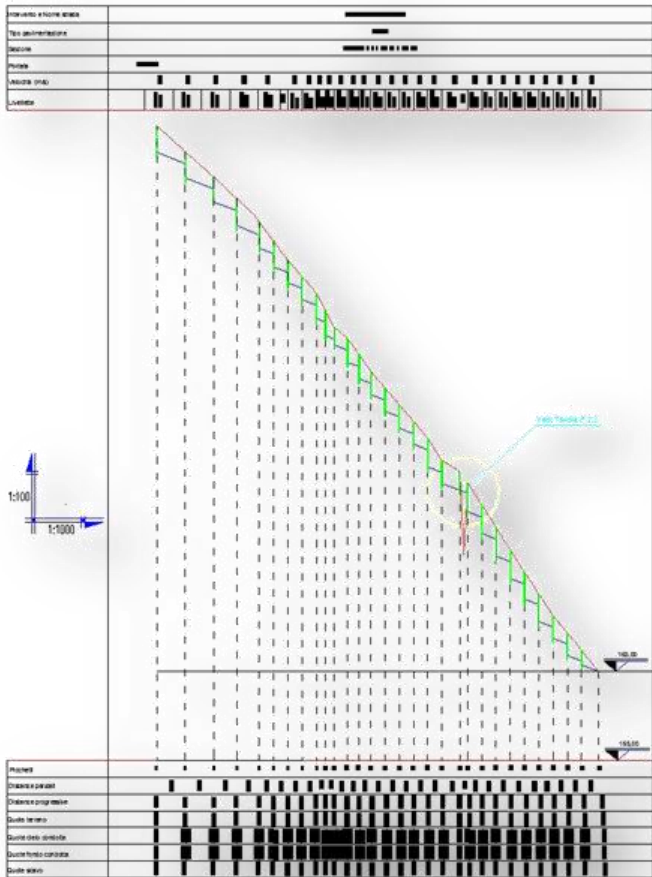
QUADRANTE DI PROVENIENZA DEI VENTI FREDDI INVERNALI



Saving energy and sustainable design

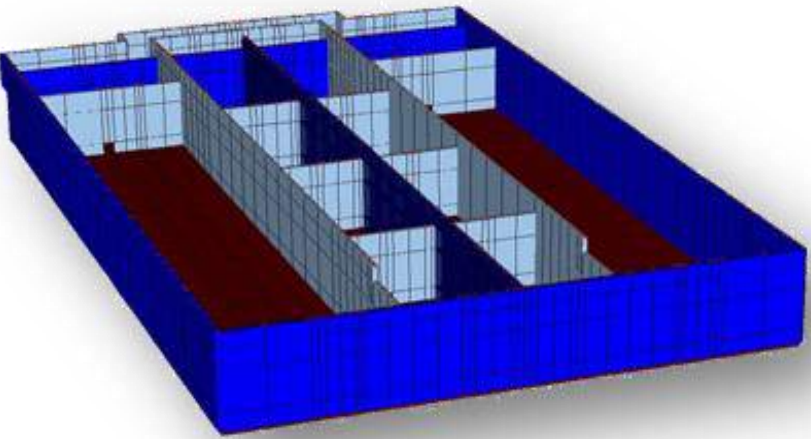
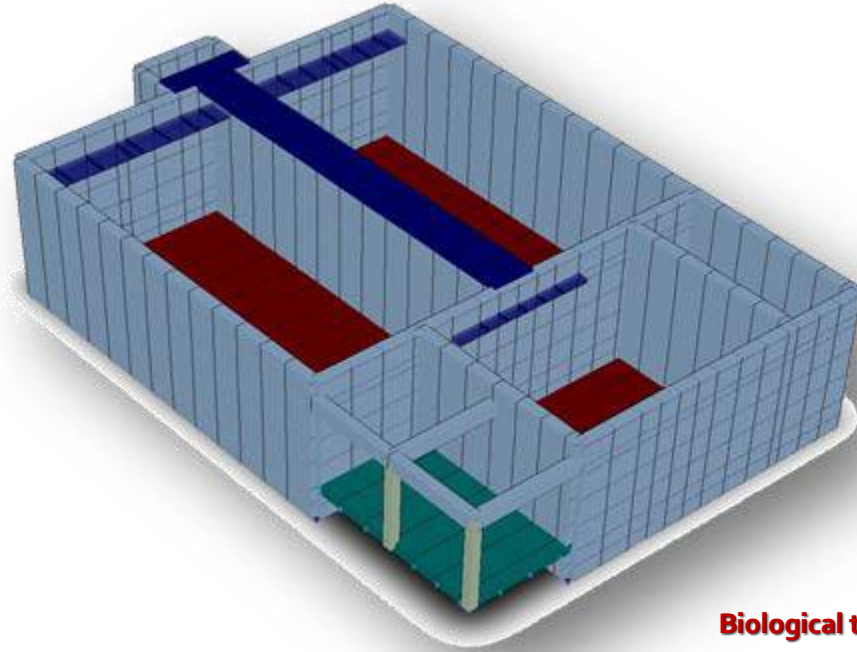
Engineering

Urban drainage system

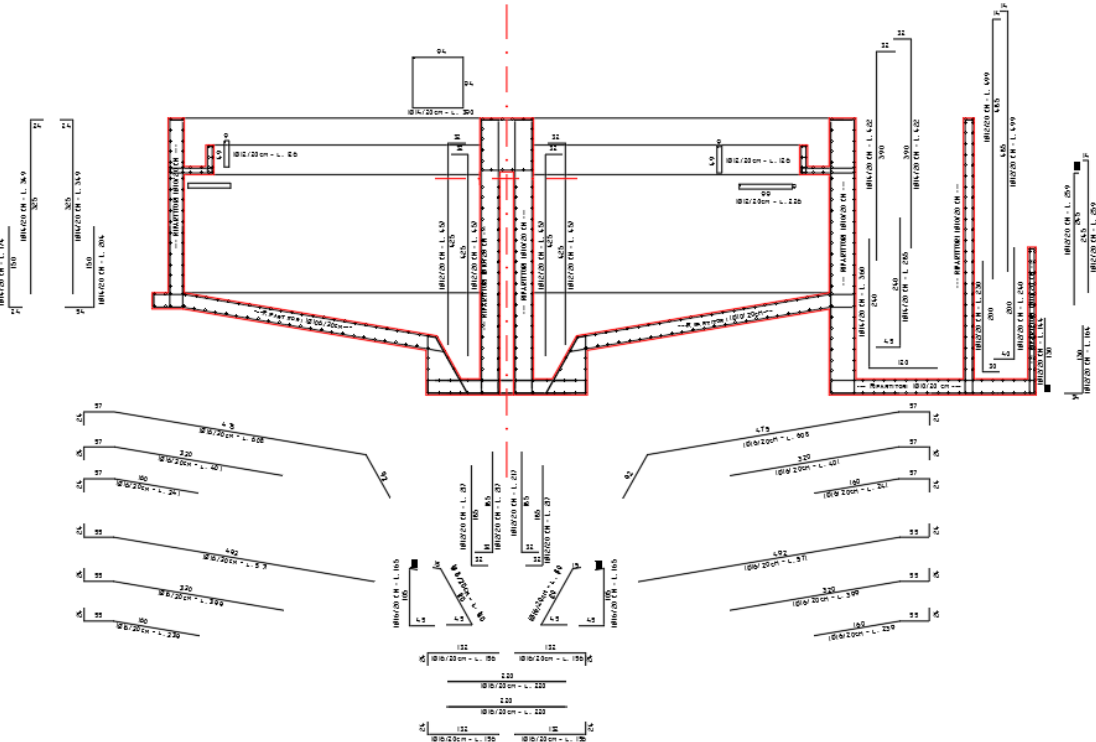


Expansion of the sewer system in the town of Maierato – longitudinal profile

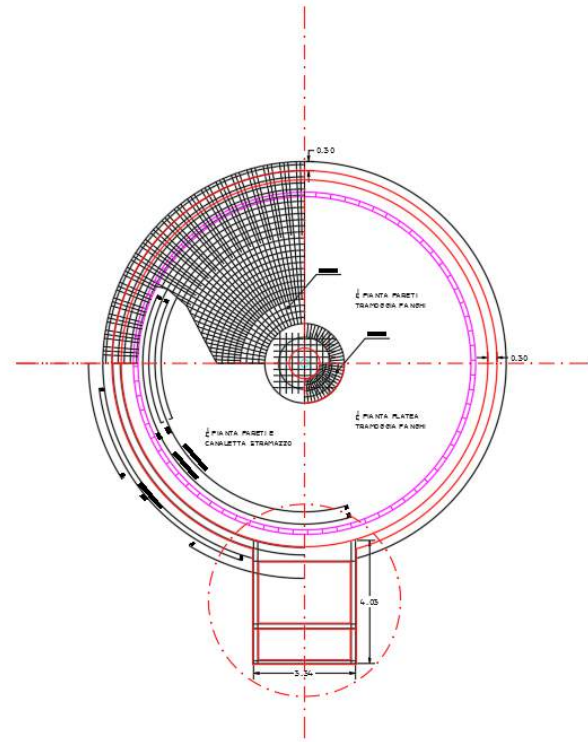
Water treatment plants



Biological treatment of a waste water treatment plant



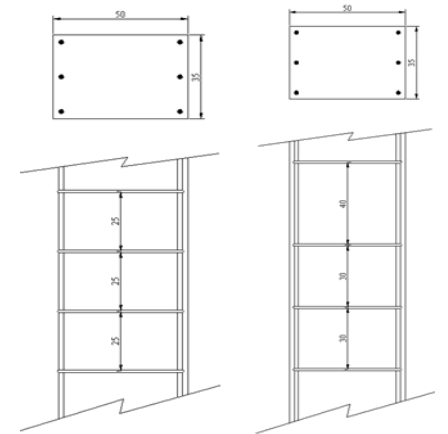
Settling tank of a purification plant



CITY OF PIZZO (VV) STRUCTURAL ADJUSTMENT OF THE BUILDING OF THE ELEMENTARY SCHOOL SAN SEBASTIANO

Consistency of the work:

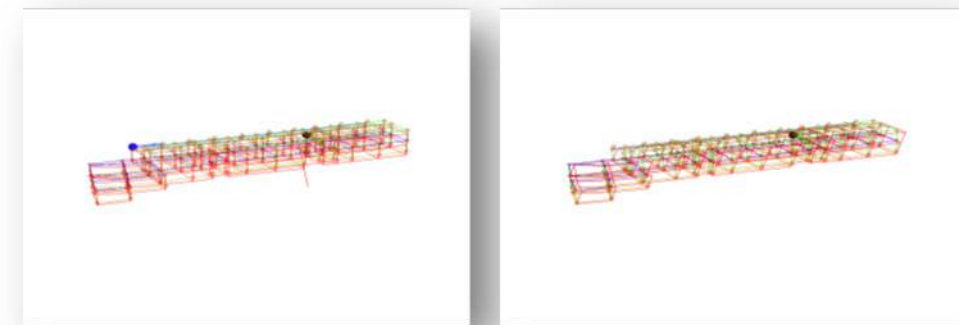
- Visual investigation focused on a study of matter of structures;
- Extraction of concrete cores and subsequent crushing test;
- Extraction of steel bars and subsequent testing in the laboratory;
- Critique of the degradation and of the crack pattern;
- Preliminary and final design, construction management and safety coordination of the restoration, renewal and structural adjustment.



Returning the magnetometric survey



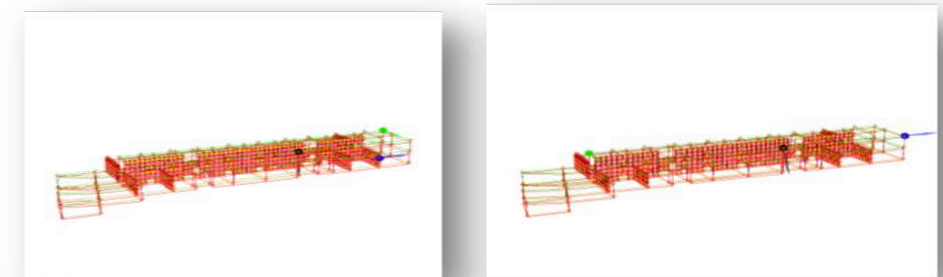
Survey of the crack pattern



Mathematical model of the existing



Extraction of concrete cores



Mathematical model after surgery



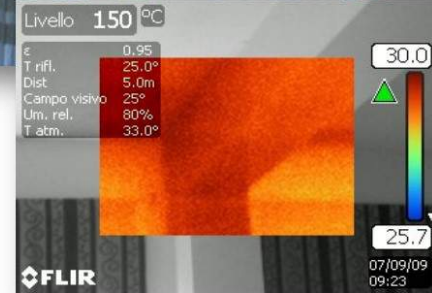
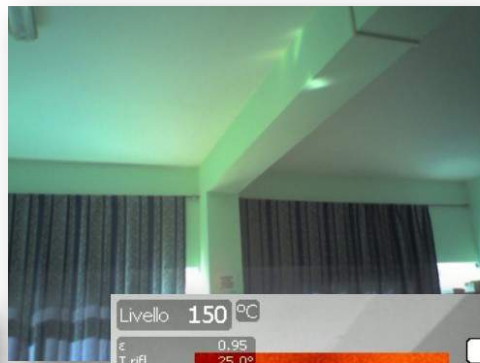
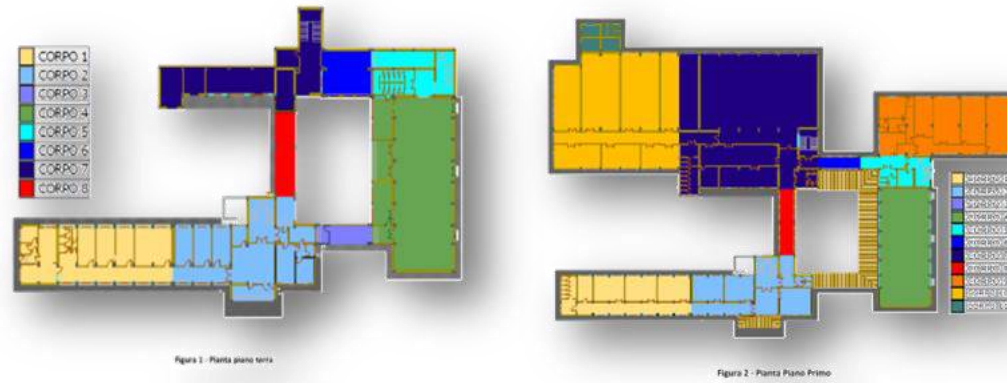
Loading tests on the floor



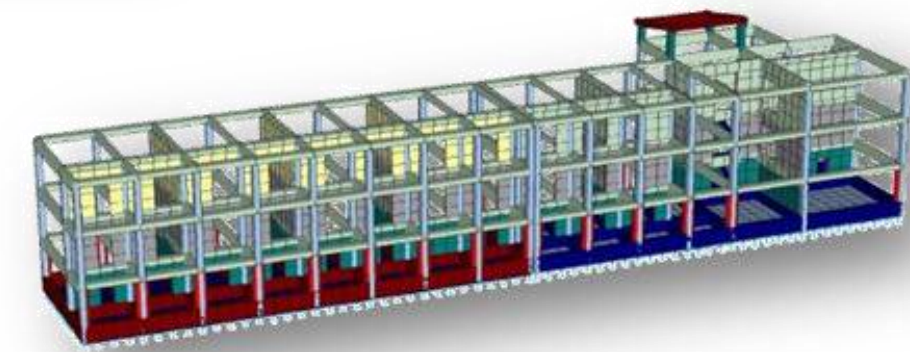
Strengthening works

Structural monitoring and controls

PROVINCE OF VIBO VALENTIA
INSTITUTE I.P.S.I.A.



THERMOGRAPHIC SURVEY TO MEASURE THE WARPING OF FLOORS



SONIC INVESTIGATION TO VERIFY THE HOMOGENEITY OF THE CONCRETE

Structural monitoring and controls

MUNICIPAL ADMINISTRATION OF IONADI (VV) TOWN HALL



DETERMINATION OF THE POTENTIAL FOR REINFORCEMENT CORROSION

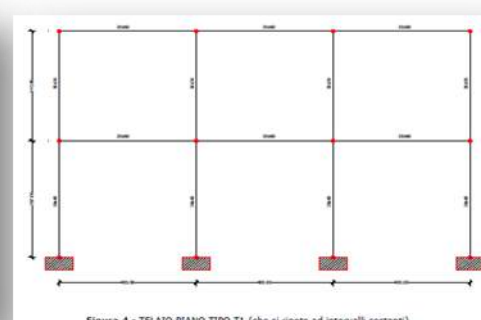
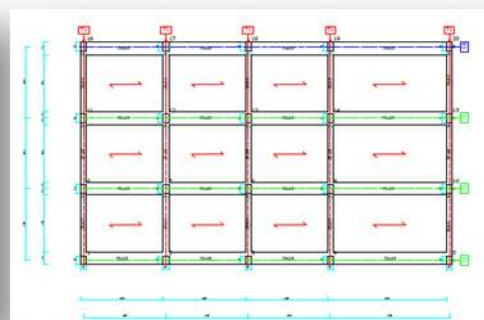
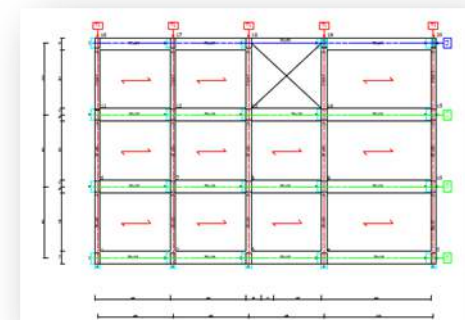


Figura 4 - TELAIO PIANO TIPO T1 (che si ripete ad intervalli costanti)

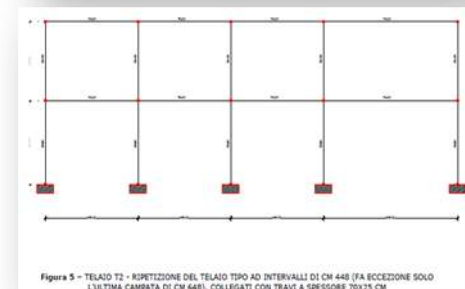
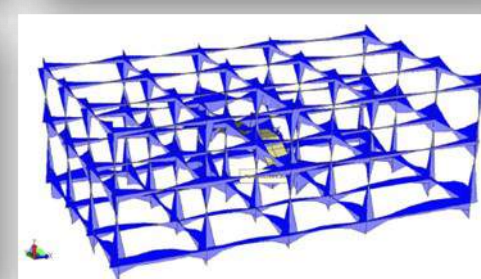
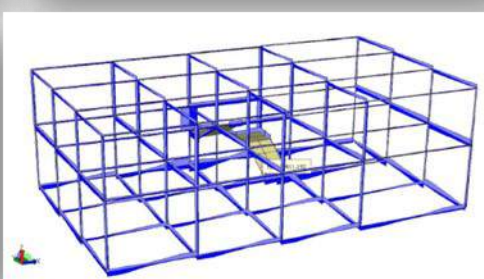
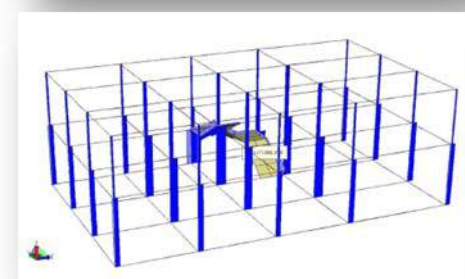
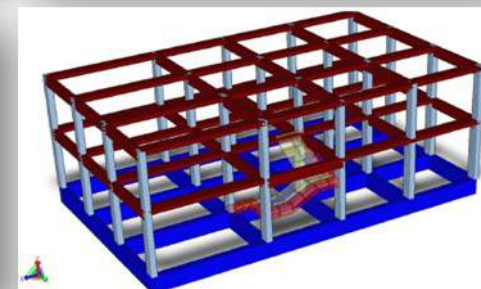
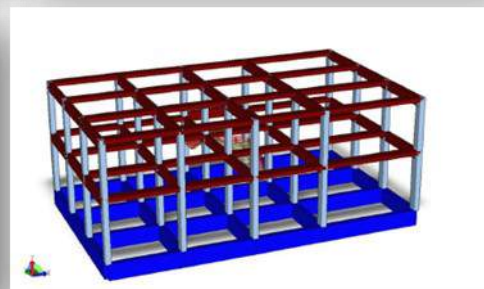


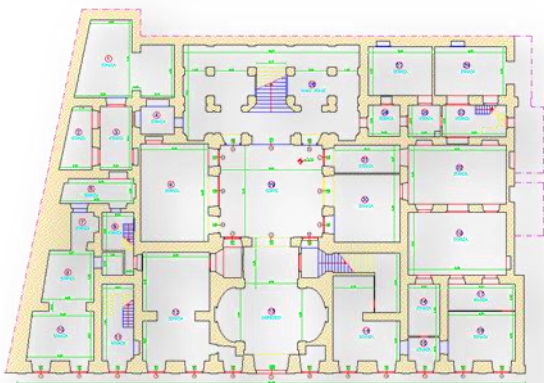
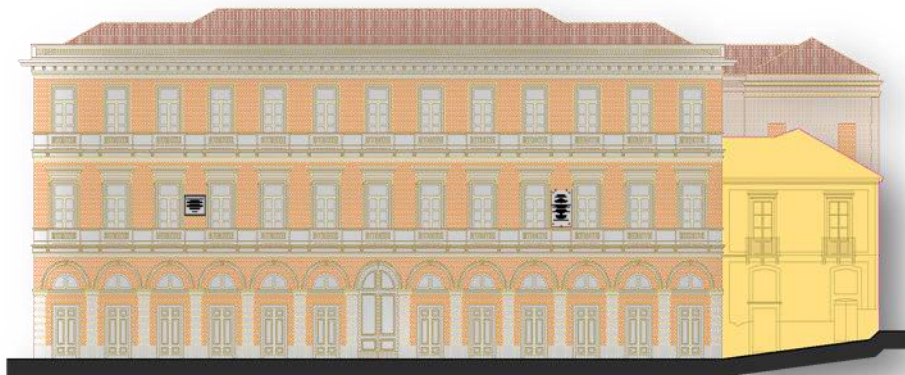
Figura 5 - TELAIO T2 - RIPETIZIONE DEL TELAIO TIPO AD INTERVALLI DI CM 448 (FA ECCEZIONE SOLO L'ULTIMA CAMPATA DI CM 648), COLLEGATI CON TRAVI A SPESORE 70X25 CM



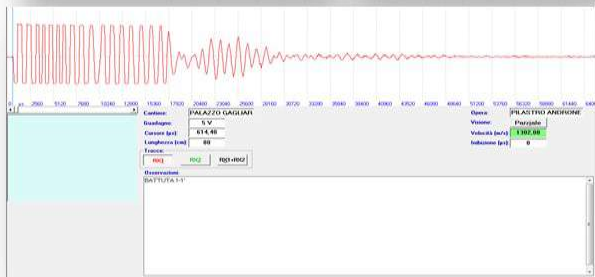
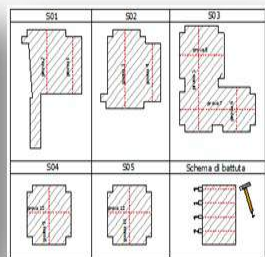
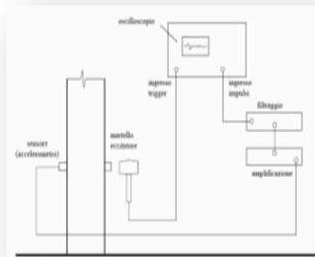
RETURN OF THE MATHEMATICAL MODEL

Structural monitoring and controls

CITY OF VIBO VALENTIA (VV)
PALAZZO GAGLIARDI - XVI SEC.

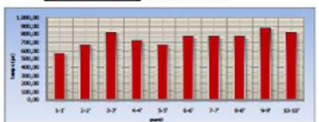


GEOMETRIC AND MATERIAL RELIEF

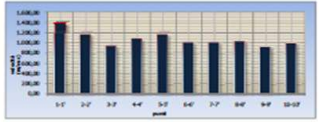


 DPM Engineering		INDAGINI NON DISTRUTTIVE		
		PROVA SONICA		
Procedura Tecnica di riferimento		PT001/S05		
DATI IDENTIFICATIVI DELLA PROVA				
Committente	Amministrazione Comunale di Vibo Valentia			
Progetto	Indagini Strutturali sul Palazzo Gagliardi			
Tipologia struttura	Muratura			
Ubicazione prova	Piano Terra- PILASTRO SCALA			
N. Prova	11			
Data prova	11/06/19			
Punti	Tempo (µs)	Spazio (cm)	Velocità (m/sec)	Note
1-1'	563,20	78,00	1.364,94	-
2-2'	665,60	78,00	1.171,88	-
3-3'	819,20	78,00	952,15	-
4-4'	716,80	78,00	1.086,17	-
5-5'	665,60	78,00	1.171,88	-
6-6'	768,00	78,00	1.015,63	-
7-7'	768,00	78,00	1.015,63	-
8-8'	768,00	80,00	1.041,67	-
9-9'	870,40	81,00	910,61	-
10-10'	819,20	82,00	1.000,98	-

Velocità media: 1.077,35 m/sec



Punti	Velocità (m/sec)
1-1'	1.364,94
2-2'	1.171,88
3-3'	952,15
4-4'	1.086,17
5-5'	1.171,88
6-6'	1.015,63
7-7'	1.015,63
8-8'	1.041,67
9-9'	910,61
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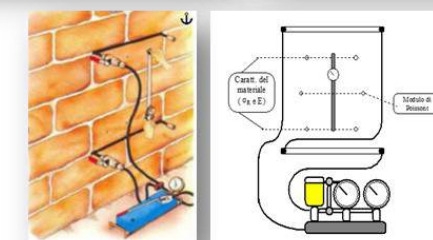
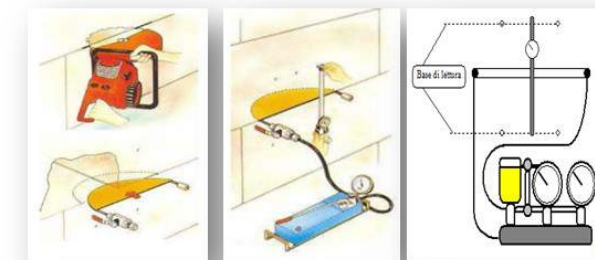
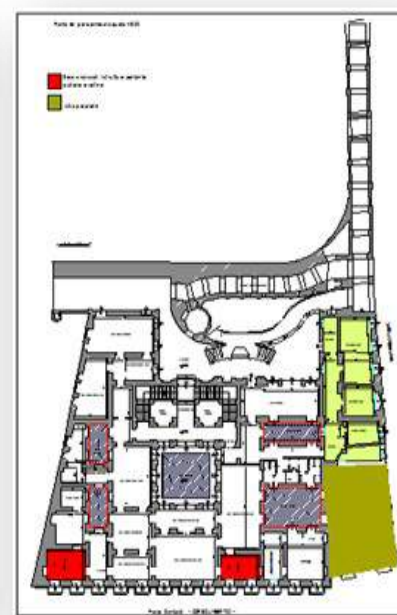
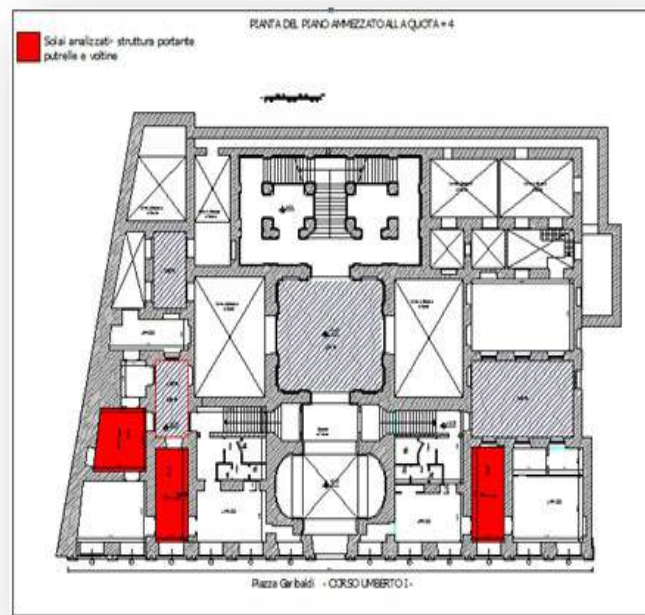


Punti	Velocità (m/sec)
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2-2'	1.171,88
3-3'	952,15
4-4'	1.086,17
5-5'	1.171,88
6-6'	1.015,63
7-7'	1.015,63
8-8'	1.041,67
9-9'	910,61
10-10'	1.000,98

SONIC INVESTIGATION ON SUPPORTING STRUCTURES

Structural monitoring and controls

CITY OF VIBO VALENTIA (VV) PALAZZO GAGLIARDI - XVI SEC.



LOADING TESTS ON WOODEN FLOOR

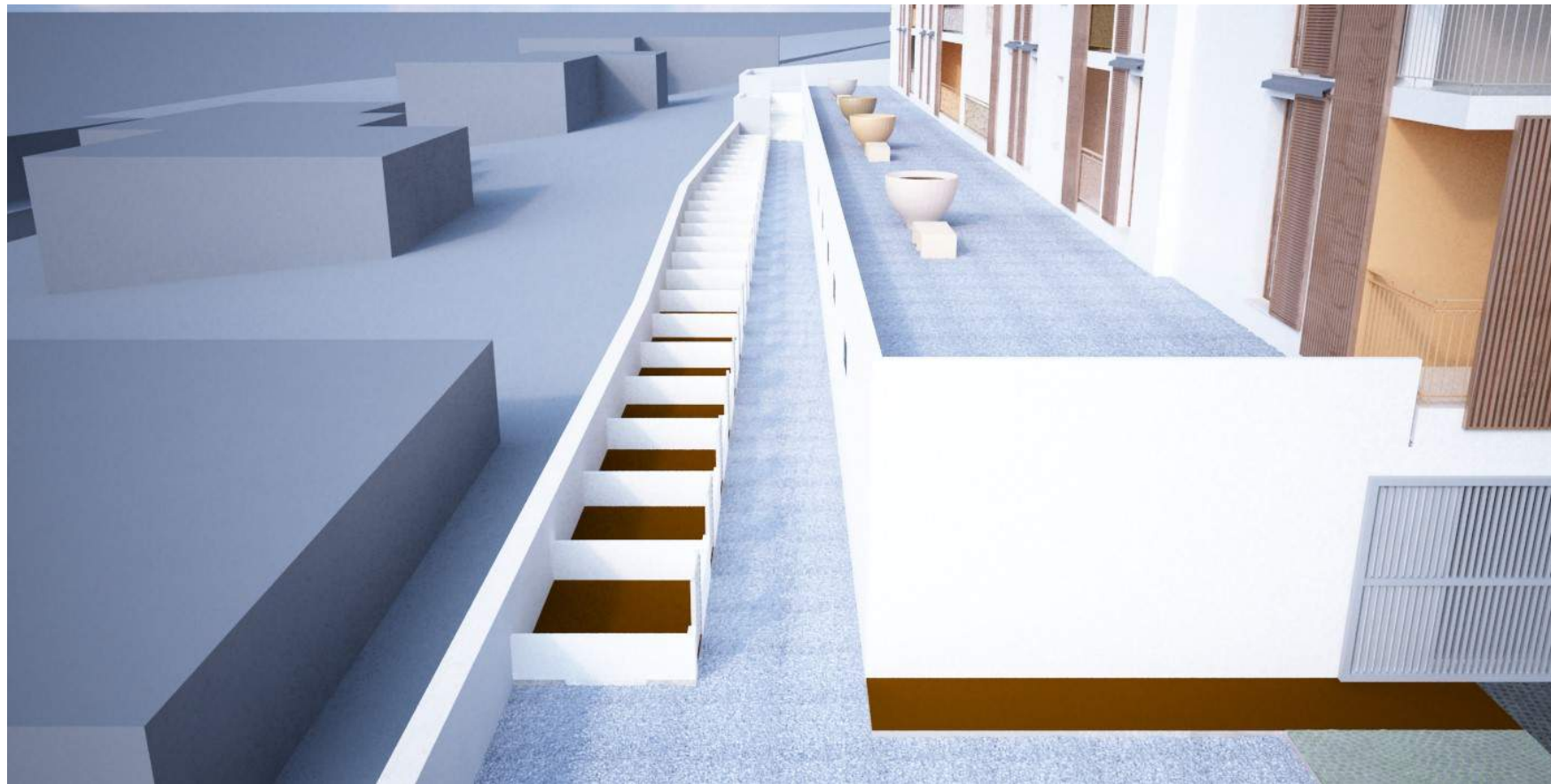
FLAT JACKS SINGLE AND
DOUBLE

Structural monitoring and controls

Private estate plan

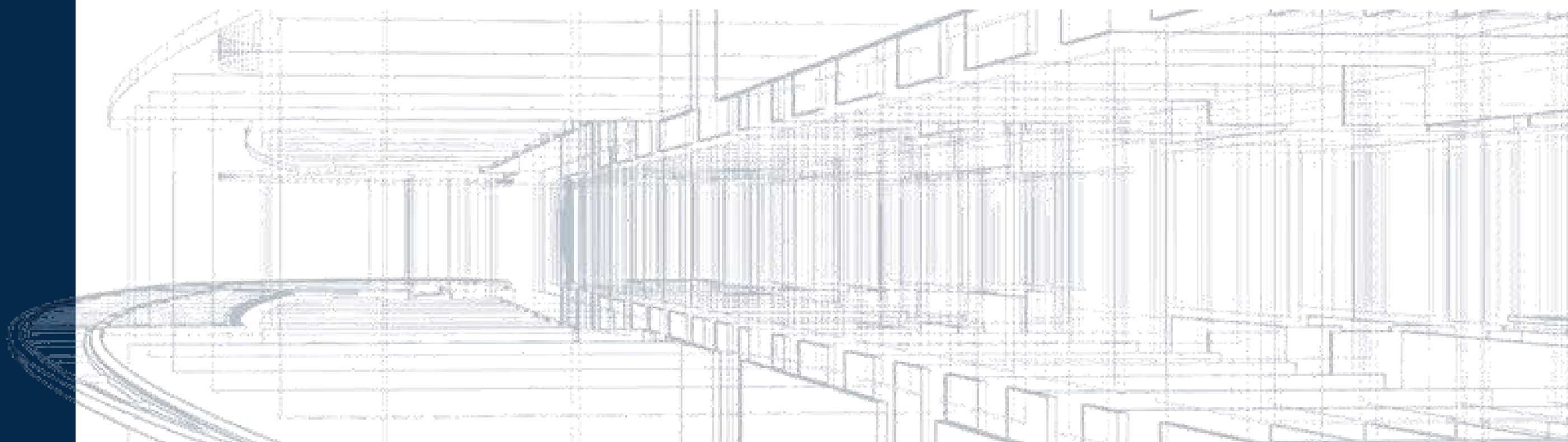


Urban Design



Building for residential
applications

Architecture and interior design



STC Engineering & Consulting

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