

Template for Evidence(s) UI GreenMetric Questionnaire

University : Gebze Technical University
Country : Türkiye
Web Address : www.gtu.edu.tr

[2] Energy and Climate Change (EC)

[2.3] Smart Building Implementation

***Min. at least five requirements for each building**

No.	Name	Place	Automation		Safety				Energy		Water		Indoor Environment				Lighting				Building Area (m ²)
			B1	B2	S1	S2	S3	S4	E1	E2	A1	A2	I1	I2	I3	I4	L1	L2	L3	L4	
1	Building H2 Department of Materials Science and Engineering	Kocaeli, TÜRKİYE				X	X		X		X									X	14066,00
2	Building I2 Department of Chemistry	Kocaeli, TÜRKİYE				X	X		X		X									X	16419,00
3	Building N2 Department of Electronics Engineering	Kocaeli, TÜRKİYE				X	X		X		X									X	14289,00
4	Building O2 Department of Management	Kocaeli, TÜRKİYE				X			X		X									X	12034,63
5	Building N Department of Architecture	Kocaeli, TÜRKİYE				X	X		X		X		X	X		X		X	X	X	4929,00
Total																				45318,63	

Smart building implementation

$$\frac{\text{total smart building area}}{\text{total building area}} \times 100\%$$

Total Building Area: 148394,21 m²

Smart Building Area: 45318,63 m²

$$45318,63 \text{ m}^2 / 148394,21 \text{ m}^2 \times 100\% = 30,54\%$$

Note: One building could be classified as a smart building if it has a minimum of 5 features.

Building H2
Department of Materials Science and Engineering



Building I2
Department of Chemistry



Building N2
Department of Electronics Engineering



Building O2
Department of Management



Building N
Department of Architecture



Supporting Data:

Gebze Technical University, Building I2 Department of Chemistry



Automatic fire system in the building



Flood control at door entrances

Gebze Technical University, Building N2 Department of Electronics Engineering

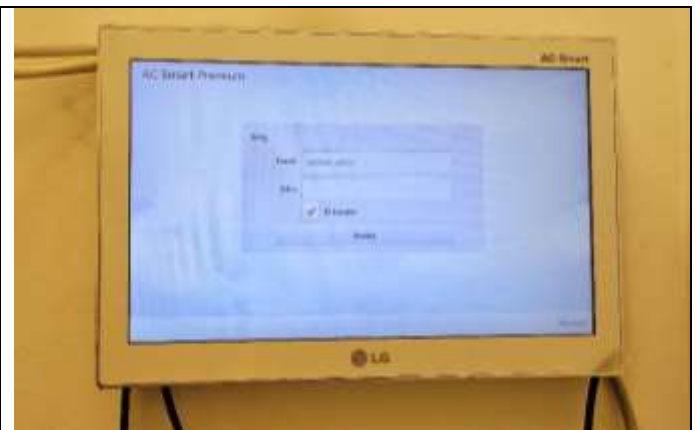


Security and surveillance system



Glass floors providing natural light to basements

Gebze Technical University, Building N Department of Architecture



Thermal comfort, Air quality monitoring systems

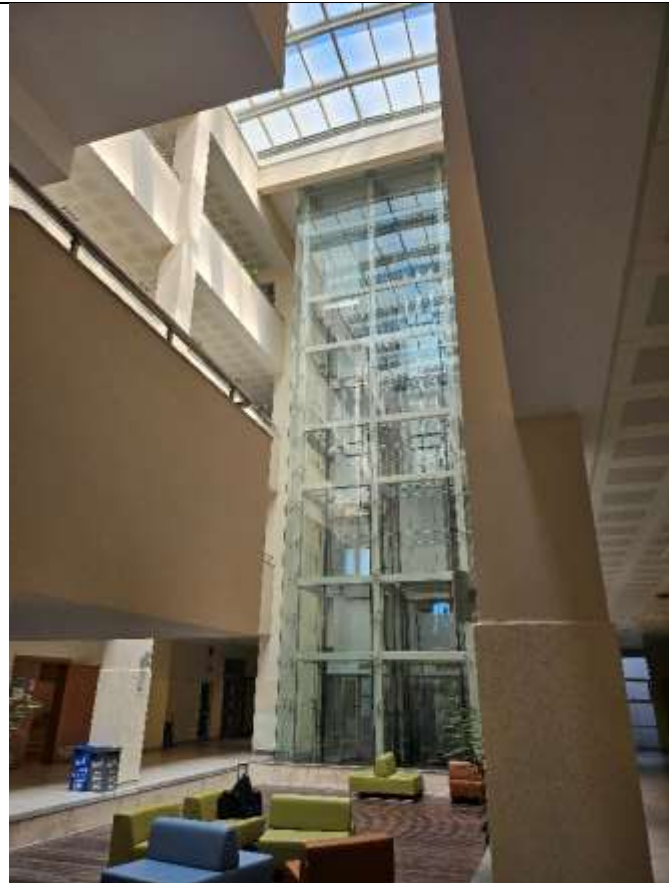


LED lights in the classrooms



Sun shading elements

Gebze Technical University, Building O2 Department of Management



Use of natural light in circulation areas



Thermal comfort, Air quality monitoring systems with fire detectors