

LEED® POINTS: UP TO 42

DEFENDER

MODULAR PANEL FOR PROTECTING WALLS AGAINST LATERAL SOIL PRESSURE

The DEFENDER modular panel for protecting walls against ground pressure can contribute up to 42 LEED® points both directly and indirectly.

L&T - LOCATION & TRANSPORTATION		It contributes up to 2 points
High Priority Site & Equitable Development:		2
<ul style="list-style-type: none"> • It creates a physical barrier to protect walls in contact with soil against radon gas, moisture and other contaminants. • It supports brownfield redevelopment, making it easier to rebuild once the site has been remediated. 		
SS - SUSTAINABLE SITE		It contributes up to 5 points
Protect or Restore Habitat:		2
<ul style="list-style-type: none"> • It allows for direct backfilling with excavated material, reducing the use of quarried gravel. • Minimise additional excavation and disruptive works. • It helps optimise the footprint of below-grade structures. 		
Open Space:		
<ul style="list-style-type: none"> • It facilitates the construction of dry, durable underground structures. • It frees up the external surface from technical functions, thereby increasing the amount of open space available. 		1
Rainwater Management:		2
<ul style="list-style-type: none"> • Provides a vertical drainage layer. • It channels water towards collection and drainage systems. • It reduces the hydraulic pressure on the walls. 		
E&A - ENERGY & ATMOSPHERE		
Minimum Energy Performance:		prerequisite
<ul style="list-style-type: none"> • It improves the condition of the foundation slab and below-grade envelope components by preventing moisture ingress and limiting the deterioration of insulation materials. 		
Optimize Energy Performance:		18
<ul style="list-style-type: none"> • Creates a separation layer between the building and the soil, preventing condensation and rising damp while maintaining the effectiveness of the insulation. 		
M&R - MATERIALS & RESOURCES		It contributes up to 8 points
Building Life-Cycle Impact Reduction:		from 1 to 5
<ul style="list-style-type: none"> • It reduces the amount of gravel used. • It reduces the volume of concrete. • It reduces the overall volume of transport on site, thereby limiting CO₂ emissions. 		



Sourcing of Raw Materials: <ul style="list-style-type: none"> • It is made from recycled polypropylene. 	1
Construction & Demolition Waste Management: <ul style="list-style-type: none"> • It drastically reduces the volume of fill material → fewer truck movements and less waste. • It reduces construction waste. 	2
EQ - INDOOR ENVIRONMENTAL QUALITY	
It contributes up to 9 points	
Minimum Indoor Air Quality Performance: <ul style="list-style-type: none"> • It protects the building's below-grade walls from damp. • It reduces the build-up of soil gases and pollutants from the ground. 	prerequisite
Enhanced IAQ Strategies: <ul style="list-style-type: none"> • It protects the building's ground-facing walls from condensation and the build-up of pollutants. • It reduces the growth of mould and bacteria. 	2
Low Emitting Materials: <ul style="list-style-type: none"> • Made from recycled polypropylene, it is stable, inert and free from VOC emissions. 	3
Construction IAQ Management Plan: <ul style="list-style-type: none"> • As a prefabricated system, it reduces the amount of dust generated on site. • It limits wet and complex processes. 	1
Indoor Air Quality Assessment: <ul style="list-style-type: none"> • It limits the spread of moisture. • It contains no VOCs. 	2
Thermal Comfort: <ul style="list-style-type: none"> • Reducing moisture diffusion improves occupants' thermal comfort and stabilises the floor temperature. 	1

Defender contributes to the LEED® protocol by comprehensively improving a building's environmental performance, addressing ground-level structures to control moisture ingress and soil gas migration, optimise durability, support energy efficiency and promote better indoor air quality.

