# Integritank System®

Advanced waterproofing technology based on ESSELAC's unique MMA-based resin system





# Integritank – Applications – Buildings

#### **GREEN AND INVERTED ROOFS**

INTEGRITANK® cold waterproofing provides simple and effective application and long-term protection on a wide variety of roof types.

The system is BBA certified for use also on non-pitched roofs

#### **PARKING LOTS**

Waterproofing and non-slip wear layer
DECSEAL® cold-applied, used for parking lot security,
available in various colors

#### **UNDERGROUND STRUCTURE**

PREPRUFE® Plus membranes protect foundation slabs and walls from groundwater and aggressive environments

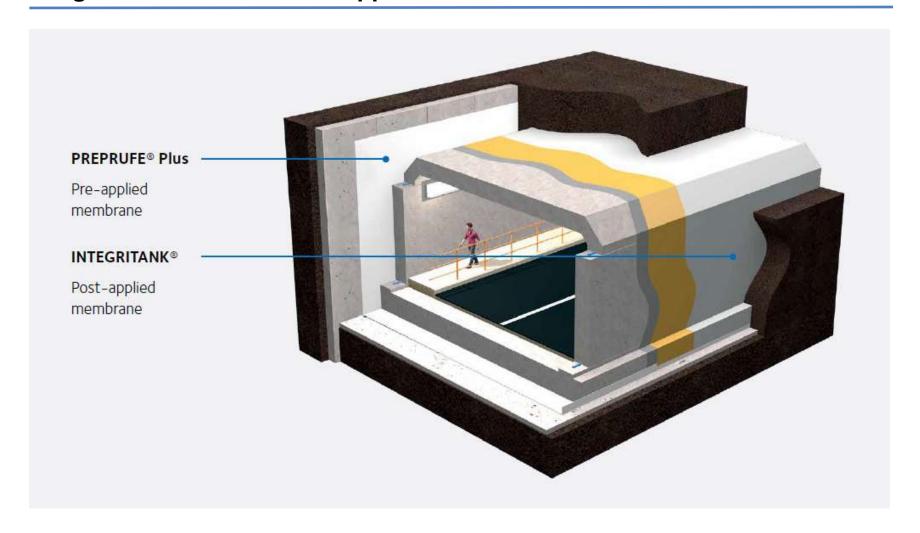
#### **CEILINGS, TERRACES, BALCONIES, FOUNDATION WALLS**

INTEGRITANK® waterproofing of the structure applied by spraying or by hand on cold application ensures simple and effective application and long-term protection for years

## **Buildings**



# **Integritank – Infrastructure Applications**

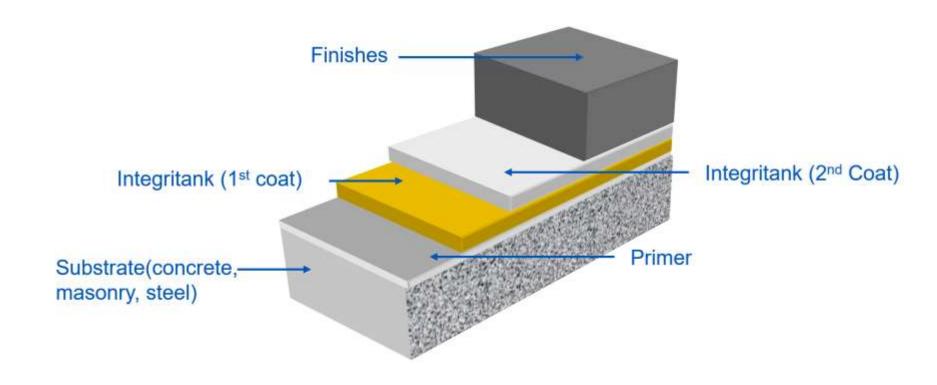


## Infrastructure

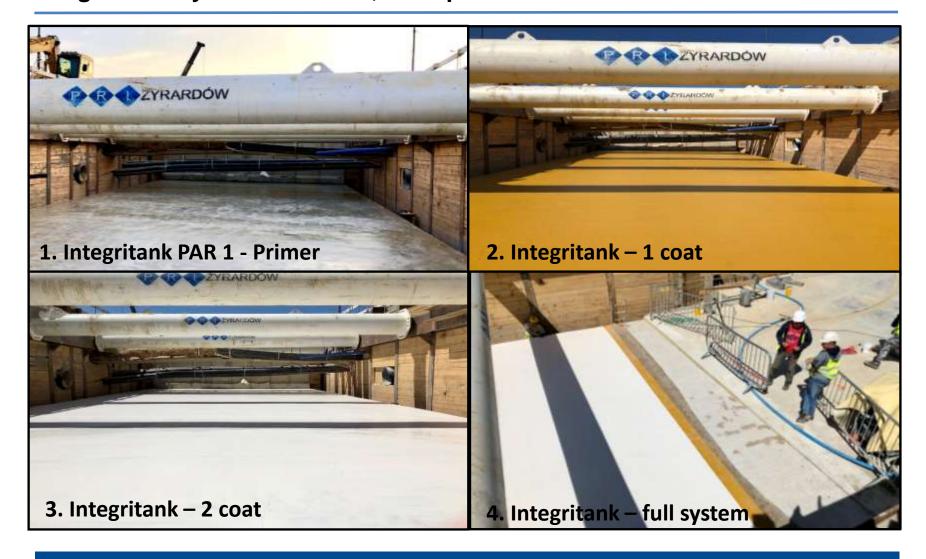


# **Integritank - system components**

# **System Layer Layout**



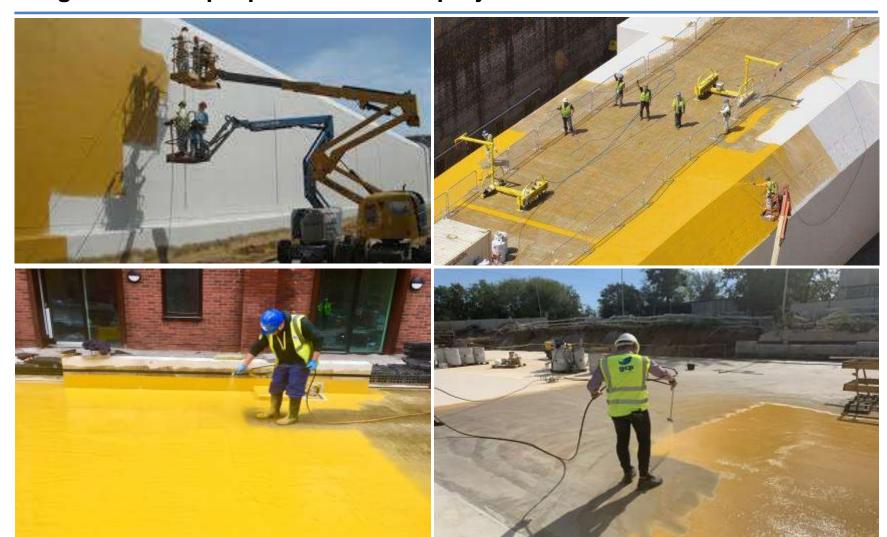
# Integritank - system elements, example Metro Line II Warsaw



## **Application Steps**



# **Integritank - sample photos from the project**



Many types of construction – one proven waterproofing system

# Integritank – ESSELAC resin technology

- 1. ESSELAC is a combination of polymer resins with methacrylate monomers (MMA is one of them)
- 2. MMA (methyl methacrylate) makes it possible to convert liquid products into solids. This process is called polymerization
- 3. Both ESSELAC and MMA are components of the Integritank system
- Over 40 years of experience, several unique ESSELAC polymer resins have been developed to adapt products to application requirements



## Unikalna, najwyższej jakości technologia ESSELAC

# Integritank – advantages of the system during application

- Fast application (even 1'500-2'000m2/day)
- Can be applied to concrete as early as 7 days after concreting
- Possibility of introducing technological movement or laying subsequent layers as soon as 1 hour after the end of the application
- Fast-setting even at low temperatures (including subzero temperatures)
- Applied in two layers of different colors for easy quality control
- Can be used on irregularly shaped surfaces
- No time limits between the application of subsequent layers
- Easy machining of complex workpieces by spraying







# Integritank – advantages of the system after application

- Seamless, liquid membrane applied without critical overlaps or contacts
- Fully, strongly and permanently bonded to the substrate
- No water migration between the waterproofing and the structure
- Root Resistant
- Resistant to UV rays
- Ensuring durability for the designed service life of the structure up to 120 years
- Excellent, documented references on more than 40 years of construction worldwide
- It has the ability to bridge cracks in concrete
- Chemically resistant



system Integritank



# Integritank – excellent crack bridging capability

The system is flexible, it will effectively transfer min. 10x larger scratches than the permissible 0.3mm also at sub-zero temperatures.

System #1: Integritank Waterproofing Membrane

Property	Test Method	Result	Requirement	
Extensibility after Heat Aging [Pass/Fail] 3 specimens; 76mm x 102mm x avg, 2mm (dry) Cond. 14d @ 70±2°C;			No Censisina	
Test Crack Extension @ 12.7mm/min from 0.00mm to 6.35mm; Visual Inspection in extended position	NOTHI O TOLL	Pass	No Cracking	

System #1: Integritank Waterproofing Membrane

Test Method	Result	Requirement
ASTM C 1305	Pass	No Cracking
	Pass	Report
	Pass	Report
		ASTM C 1305 Pass





\*Elongation of the membrane at substrate crack 6.35mm

Integritank system - continuity of insulation - bridging of cracks - no

# Integritank – also available in a hand/manual version

- For small areas
- In restricted areas
- Repair Locations
- No special equipment required
- In places exposed to dirt of finishing elements



Bezpieczny, szybki i łatwy w aplikacji system Integritank

# Integritank – examples of selected reference objects

Project Name	Structure	Country 3 5	ize Ji Size Metric	<ul> <li>System</li> </ul>
City of Dreams (Integritank)	Podium Deck & Planters - Refurb	China	130,000 m2 (Square metres)	Integritank
Tseung Kwan O Depot - MTRC 605 Tanking	Platform - New	China	84,000 m2 (Square metres)	Integritank
Al Zeina - Raha Beach - Podium Deck	Podium Deck - New	United Arab Emirates	80,000 m2 (Square metres)	Integritank
Tai Po Water Treatment Works	Roof - Refurb	China	30,000 m2 (Square metres)	Integritank
Canary Wharf (Integritank)	Roof - New	United Kingdom	27,000 m2 (Square metres)	Integritank
Wynn Palace	Fountain - New	China	24,000 m2 (Square metres)	Integritank
Wynn Palace	Fountain	China	24,000 m2 (Square metres)	Integritank
Great West Quarter	Podium Deck & Balcony - New	United Kingdom	22,000 m2 (Square metres)	Integritank
Blaydon Centre	Roof - New	United Kingdom	21,865 m2 (Square metres)	Integritank
Battersea PS Phase 1	Podium Deck	United Kingdom	20,000 m2 (Square metres)	Integritank
Al Zeina - Raha Beach - Balconies	Balcony - New	United Arab Emirates	20,000 m2 (Square metres)	Integritank
375 Kensington High Street	Podium Deck - New	United Kingdom	18,000 m2 (Square metres)	Integritank
MTRC Yau Tong Station Package 2	Roof - New	China	18,000 m2 (Square metres)	Integritank
MTRC 604 Yau Tong Station	Roof - New	China	17,000 m2 (Square metres)	Integritank
Metro Warszawa II linia - Stacja CO4	Deck	Poland	16,000 m2 (Square metres)	Integritank
Weeke Development (Waitrose)	Podium Deck - New	United Kingdom	14,461 m2 (Square metres)	Integritank
Greenwich Reach Podium	Podium Deck - New	United Kingdom	14,000 m2 (Square metres)	Integritank
Barangaroo Headland Park	Basement	Australia	12,562 m2 (Square metres)	Integritank
Aquatic Centre - 2012 Olympic Park (Integritank)	Podium Deck - New	United Kingdom	11,300 m2 (Square metres)	Integritank
Stonegrove Cannons Square	Podium Deck & Balcony - New	United Kingdom	10,000 m2 (Square metres)	Integritank
Evolution - Phase 1	Podium Deck	United Kingdom	10,000 m2 (Square metres)	Integritank
Newhaven Marina - Phase 3	Podium Deck	United Kingdom	10,000 m2 (Square metres)	Integritank
Juraina Shopping Mall	Roof - New	United Arab Emirates	9,453 m2 (Square metres)	Integritank
Al Zeina - Raha Beach - Planters	Planters - New	United Arab Emirates	9,000 m2 (Square metres)	Integritank
Battersea Reach (Integritank)	Podium Deck - New	United Kingdom	8,750 m2 (Square metres)	Integritank
CBXIII Milton Keynes	Podium Deck - New	United Kingdom	8,000 m2 (Square metres)	Integritank
Al Zeina - Raha Beach - Inverted Roofs	Inverted Roof - New	United Arab Emirates	8,000 m2 (Square metres)	Integritank
East Side Plaza, Gunwharf Quay (Integritank)	Podium Deck - New	United Kingdom	7,000 m2 (Square metres)	Integritank
Haggerston West Kingsland Estate	Podium Deck & Balcony - New	United Kingdom	7,000 m2 (Square metres)	Integritank
Barangaroo Headland Park	Green Roof - New	Australia	7,000 m2 (Square metres)	Integritank
Lakeshore (Integritank)	Podium Deck - New	United Kingdom	6,700 m2 (Square metres)	Integritank
Canada Water (Gardens)	Podium Deck	United Kingdom	6,600 m2 (Square metres)	Integritank
Mirgab Shopping Mall	Roof - New	United Arab Emirates	6,578 m2 (Square metres)	Integritank
Oyster Wharf	Podium Deck & Balcony - Refurb	United Kingdom	6,341 m2 (Square metres)	Integritank
Trinity Quarter	Podium Deck - New	United Kingdom	6,250 m2 (Square metres)	Integritank
Sjobadet Park	Podium Deck - New	Norway	6,000 m2 (Square metres)	Integritank
Reliance, GHQ, Mumbai	Roof	India	6,000 m2 (Square metres)	Integritank
Battersea Reach Block B (Integritank)	Podium Deck - New	United Kingdom	5,910 m2 (Square metres)	Integritank
Gun Wharf Quay (Canalside Apartments)	Roof - New	United Kingdom	5,550 m2 (Square metres)	Integritank

# **Excerpt from the project list...**



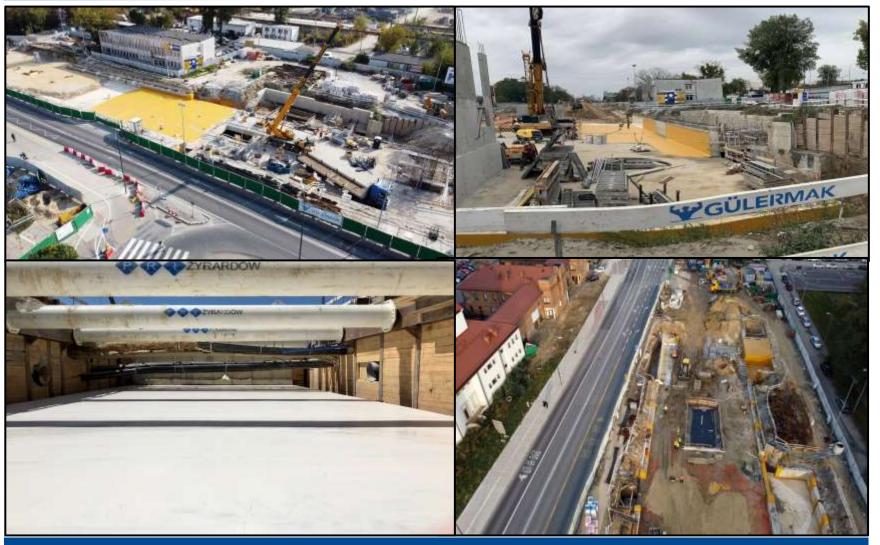
# Integritank - Anglia, Vauxhall St Georges Wharf



**Examples of reference objects** 



# Integritank - Poland, Metro Line II, Warsaw stations: C04, C05, C19



Przykłady obiektów referencyjnych

# Integritank - Poland, Metro Line II, Warsaw stations: C01



Date of the picture 21/03/2024. Station under construction currently.



# Integritank – Anglia, Green Park Village, Berkshire



**Examples of reference objects** 



# Integritank - Anglia, Manchester Block I Middlewood



**Examples of reference objects** 



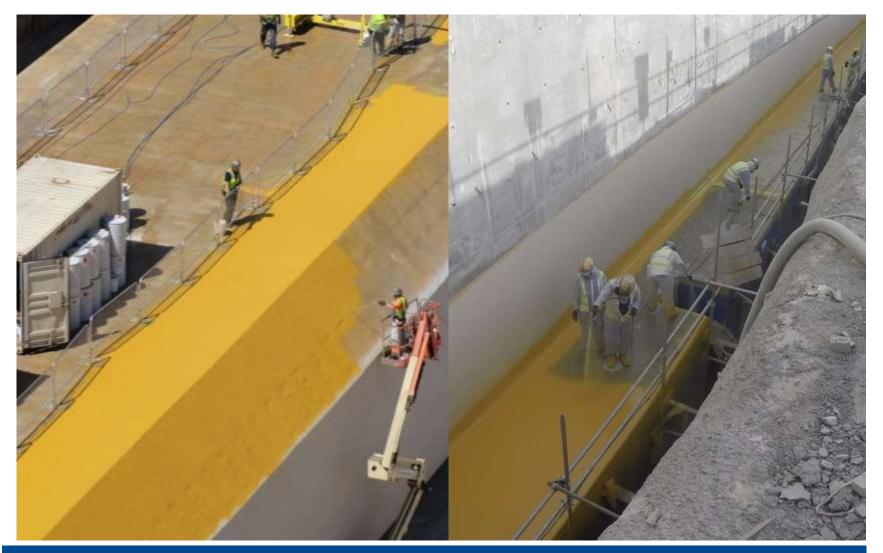
# Integritank – UAE, ABU DHABI – Underwater Road Tunnel for Yas Island



**Examples of reference objects** 



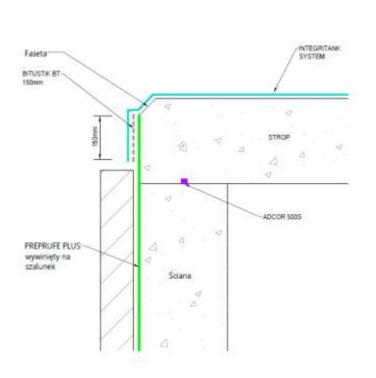
# Integritank – Doha Metro Red Line South

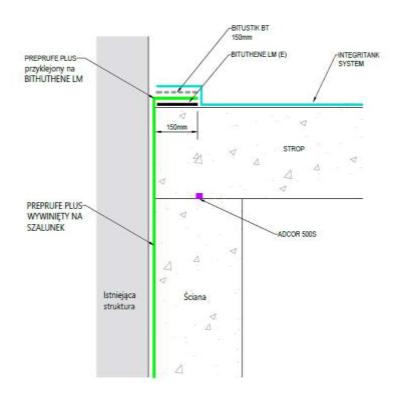


**Examples of reference objects** 

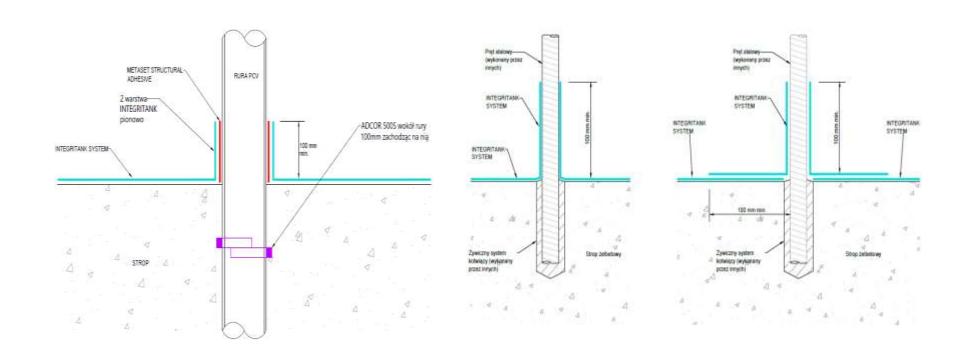


# Integritank – details of the walls – roof slab interface

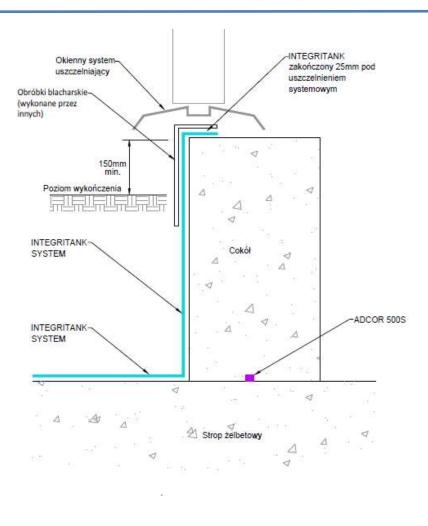




# Integritank – penetrations details



# Integritank – detail of the insulation termination at the window/door





# Questions?

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