

Waterproofing systems

Alchimica's polyurethane waterproofing systems are defined layer by layer for every surface, from roofs to foundations and from car parks to bridge decks. This summary brings together what you need to choose the right system and primer.

Application conditions

Application temperature	5 °C – 35 °C
Relative humidity	max. 85%
Substrate temperature	at least 3 °C above dew point
Weather	do not apply in rain or snow
Above 35 °C	keep materials and equipment cool, avoid the hottest hours
Below 5 °C	ask for technical support first

Systems by application

APPLICATION	MAIN PRODUCT	LAYERS	NOTE
Exposed concrete roof	HYPERDESMO®	Primer MICROSEALER-50 / AQUASmart®-DUR → joints HYPERSEAL®-EXPERT-150 → HYPERDESMO® (2 coats) → top coat HYPERDESMO®-ADY-E	25-year CE; SRI 102 (cool roof)
Same-day concrete roof	HYPERDESMO® -HAA	Primer GEODESMO-50 / AQUASmart®-DUR → HYPERSEAL®-EXPERT-150 → geotextile → HYPERDESMO®-HAA (single coat)	One coat, one day; less rain risk
Exposed concrete roof, water-based	HYPERDESMO® AQUA	Primer AQUASmart®-DUR → HYPERDESMO® AQUA (2 coats)	For coastal and mountain areas
Exposed car park	HYPERDESMO® + ADY 810	Primer → HYPERDESMO® → ADY 810 → silica sand broadcast → ADY 810 → line marking AQUASmart®-TC 2K Floor Protect	Heavy traffic, chemical and fuel resistance
Inverted roof (under screed, ballast or tiles)	HYPERDESMO® -PB-2K / PB-1K FC	Angle fillet HYGROSMart® → primer → HYPERDESMO®-PB → geotextile → insulation boards → geotextile → screed / ballast / tiles	Insulation and waterproofing together
Old bitumen membrane refurbishment	HYPERDESMO®	Details HYPERDESMO®-PB-1K → primer UNIVERSAL PRIMER-2K-4060 → HYPERDESMO® + geotextile (2 coats) → ADY-E	No need to remove the old membrane

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Potable water tank	HYPERDESMO® -2K-W	Primer AQUASmart®-DUR → HYPERSEAL®-EXPERT-150 → HYPERDESMO®-2K-W	Certified for potable water
Metal roof	HYPERDESMO® / HYPERDESMO® AQUA	Primer MICROSEALER-50 → HYPERSEAL®-EXPERT-150 → HYPERDESMO® + geotextile at details (2 coats) → ADY-E	Flat, inclined and vertical surfaces
Green roof	HYPERDESMO® -PB-2K	Primer → HYPERDESMO®-PB-2K → protection geotextile → draining membrane	Root resistant; 25-year W3 CE
Below-ground external	HYPERDESMO® -PB-1K-FC / AQUASmart®-PB	Primer MICROSEALER-50 / AQUASmart®-DUR → PB membrane → draining membrane	Foundations, tunnels, basements
Wet rooms (under tiles)	HYPERDESMO® -S-WR	Primer → HYPERSEAL®-EXPERT-150 → HYPERDESMO®-S-WR → HYGROSMART®-ADHESIVE ULTRA 2K	Resists positive and negative pressure
Balconies (under tiles)	HYPERDESMO®	Primer → HYPERSEAL®-EXPERT-150 → HYPERDESMO® → HYGROSMART®-ADHESIVE ULTRA 2K	Prevents tiles detaching in the cold
Stadium stands	HYPERDESMO®	Primer → HYPERSEAL®-EXPERT-150 → HYPERDESMO® (2 coats) → ADY-E → AQUASmart®-TC 2K Floor Protect	Heavy pedestrian traffic
Bridge deck	HYPERDESMO® -300	Primer GEODESMO-50 / AQUASmart®-DUR → HYPERSEAL®-EXPERT-150 → HYPERDESMO®-300	ETAG-033 certified; withstands 225 °C thermal shock

Primer selection

A marked cell means the primer suits that substrate or condition.

	Concrete	Humid concrete	Gypsum	Metal / steel	Porous ceramic tiles	Glass / glazed tiles	PVC membranes	TPO membranes	Bitumen membranes	Low temperature application	Vapour barrier	Negative pressure / rising humidity (tanks)
PU PRIMERS												
PRIMER-PU	●	-	-	●	-	-	-	-	-	-	-	-
MICROPRIMER-PU	●	-	-	●	●	-	-	-	-	-	-	-
MICROSEALER-PU	●	●	●	●	●	-	-	-	-	-	-	-
MICROSEALER-50	●	●	●	●	●	-	-	-	-	-	-	-
GEODESMO-50	●	●	-	●	-	-	-	-	-	●	-	-
UNIVERSAL PRIMER-2K-4060	●	●	-	-	-	-	-	-	●	●	-	-
PRIMER-T	-	-	-	-	-	●	-	-	-	-	-	-
PRIMER-W	-	-	-	-	-	●	-	-	-	-	-	-
PRIMER-TPO/FPO	-	-	-	-	-	-	-	●	-	-	-	-
PRIMER-PVC	-	-	-	-	-	-	●	-	-	-	-	-
WATER-BASED PRIMERS												
AQUADUR	●	●	●	-	-	-	-	-	-	-	●	●
AQUASMART®-DUR	●	●	●	-	-	-	-	-	-	-	●	●
AQUASMART®-PRIMER PU-2K	●	●	-	-	-	-	-	-	-	●	-	-

Simplified by Fabtecon from ALCHIMICA S.A. documents (Waterproofing Solutions ENG 24 V3, Product List ENG 24 V6). See each product's data sheet for consumption, packaging and technical values. Distributor in Turkey: Fabtecon İnş. San. ve Tic. Ltd. Şti. · +90 (538) 498 08 94 · info@fabtecon.com