



MasterSeal® Roofing solutions





Master Builders Solutions from BASF

The **Master Builders Solutions** brand brings all of BASF's expertise together to create chemical solutions for new construction, maintenance, repair and renovation of structures. Master Builders Solutions is built on the experience gained from more than a century in the construction industry.

The know-how and experience of a global community of BASF construction experts form the core of Master Builders Solutions. We combine the right elements from our portfolio to solve your specific construction challenges. We collaborate across areas of expertise and regions and draw on the experience gained from countless construction projects worldwide. We leverage global BASF technologies, as well as our in-depth knowledge of local building needs, to develop innovations that help make you more successful and drive sustainable construction.

The comprehensive portfolio under the Master Builders Solutions brand encompasses concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing solutions, sealants, concrete repair and protection solutions, performance grouts, performance flooring solutions.

Working with some of the major builders and developers, BASF can provide individual tailored solutions to meet the waterproofing needs of our customers. The resulting range of waterproofing systems reduce the risk of water ingress during installation and refurbishment as well as giving long lived systems.



Challenges

Roofing is one of the most critical aspects of any building and creates special challenges for the designer and builder. Water ingress into the building can be one of the costliest building defects to repair and the correct matching of roofing system and requirements is essential. The use of reinforced concrete as the preferred building material for many structures from high rise condominiums to offices and institutional buildings requires solutions that will ensure water tightness. Roofs are constantly exposed to the elements and have to cope with the extremes of the local climate ranging from snow and ice, to blistering summer heat and every

variation in between. In addition, many roofs are now actively used for recreation or creating a green space as well as housing the services such as air-conditioning and other services. Roofs are often insulated to reduce energy usage and this creates extra challenges in design and installation.

These challenges must be considered when choosing a roofing system as well as the expectation of useable life, the ease of repair and of course the aesthetics and safety should personnel need to access the roof on a regular basis.

BASF has extensive experience in helping the designers and contractors to design, select and install the right waterproofing solutions for their buildings. With MasterSeal Roofing systems, we provide the latest technology to ensure durable and cost effective solutions for your roofing needs.

Features of MasterSeal Roofing systems	Benefits
Fast setting	Immediate waterproof protection after 1 minute
Spray applied	Fast installation up to 700m ² per day
Spray applied / fast setting	Able to waterproof vertical surfaces without running
Seamless	No joints for water to penetrate
Range of slip resistances	Suitable for ramps and flat areas
Separate wear coat	Engineered separate wear coat to take the turning forces and protect the membrane from damage
Solvent free	Low odor allowing installation on occupied buildings
Trafficable	Suitable for car and light truck traffic
Fully bonded	No place for water to track if punctured
Repairable	Easy repair of damaged areas with compatible hand applied materials
Onsite quality check	Test using holiday tester before top coat application eliminates need for water ponding test. Thickness and adhesion can also be tested on site giving peace of mind to owner



MasterSeal Solutions for new roofs

The quest for innovative building design and the desire to create more green space in urban environments has meant that fully bonded continuous membranes have become more popular. The elimination of joins, a feature of all sheet membranes, reduces the risk of leakage and coupling this with fast curing spray application makes the installation faster and waterproofing more secure. MasterSeal Roofing systems are fully bonded to all surfaces and in the unlikely event of a puncture, leakage can be traced to the source more easily. On the other hand, sheet membranes if punctured, can allow the water to track for some distance making finding the source difficult and repair is often a complex issue.

Roof gardens are increasing in popularity and we are all aware of the damage the roots of trees and plants can do to pavements and roads so having materials with no joins and with sufficient strength to resist penetration by roots is essential. MasterSeal Roofing system membranes have been shown to resist root penetration and are unaffected by soil or the organisms found in garden beds or lawns. Based on proprietary polyurethane / polyurea technology the MasterSeal Roofing membranes are able to be in constant contact with water without damage.

Exposed roofing systems need to resist damage by UV and to have a pleasing aesthetic appearance and the MasterSeal Roofing systems can deliver on this. Special UV resisting top coats protect the membrane from damage by UV and at the same time can be colored in a range of designer colours as well as with special solar reflective pigments to reduce the heat transmission of the roof. The UV topcoats need to be maintained and recoated at intervals depending on the climatic condition, to will keep the membrane working over the long term and keep the building interior dry.

Application by plural component spray machine gives an almost immediate watertight seal and allows waterproofing to even the most complex structures on horizontal and vertical surfaces and everything in between can be waterproofed. For smaller jobs, hand applied fast curing products are available. These have the same physical characteristics as the spray materials but can be applied without the need for special machinery.





MasterSeal Solutions for existing roofs



Waterproof membranes on roofs eventually wear out and replacement presents many challenges. The major challenge is to re-waterproof the roof without allowing further water ingress and the various roof membrane types and roof designs have their own special challenges. The complexity of the roof and the accessibility to remove all the old membrane may create an insurmountable hurdle.

MasterSeal Roofing system membranes have been designed to work with a range of substrate types ranging from plywood to steel to bitumen sheets to paving and concrete. Different priming techniques allow the MasterSeal membranes to be applied to all of these substrates and often not requiring the removal of the existing membrane. Spray membranes are especially useful when the

existing services like air-conditioning are not able to be removed. Often there is a desire to change the use of the roof space and the MasterSeal Roofing membranes are able to accommodate from trafficked entertainment areas to roof gardens to building maintenance unit tracks. The use of various colored top coats can be used to improve the aesthetics of the area.

Examples of roof structures that we were able to re-waterproof include marble blocks, tile mosaic, plywood, copper, steel, terracotta tiles, pavers and brick bat coba without the need to remove the substrate. In certain applications it is possible to go over bitumen sheets or PVC sheets but in these cases removal (if possible) is advised.



Comprehensive single source solutions

In many instances, it is not just the waterproofing that needs attention and sometimes the substrate or other parts of the structure need additional repairs. The MasterEmaco® range of repair materials can be used to repair damage caused by water ingress or deterioration of the building structure. The MasterBrace® range of strengthening products can increase the load carrying capacity of a roof structure especially if there is additional load on the roof such as the installation of water features or roof gardens. The MasterProtect® range of protective coatings and impregnations provide protection for areas of concrete without waterproofing and create long term durability.

BASF believes in a holistic approach to repair and protecting and can mix and match systems to give the optimum solution for the problem at hand.





Connecting partners for better answers

Continuous innovation and tailor-made solutions ensure customers using Master Builders Solutions are more successful. We operate across the Asia Pacific region, with more than 80% of our products produced within the region. The corporate culture of BASF is focused upon innovations, customers and safety. BASF has been rated among the top employers in many countries throughout the region because we ensure workplace safety, support the communities in which we are

located, and strive to utilize and produce safe and environmentally appropriate technologies. Master Builders Solutions from BASF offers a wide range of building construction products, concentrating on performance flooring solutions, repair and protection solutions, precision grouting solutions and waterproofing solutions. Our internationally connected technical experts and our local sales force combine forces to ensure that solutions are tailored to meet local conditions.



Product selector

	Exposed concrete	Exposed other materials	Planter boxes	Roof gardens paving	Exposed concrete	Exposed other materials	Planter boxes	Roof gardens paving	Exposed foot traffic	Exposed vehicle traffic	Gardens	Pavers	Loading docks / garbage collection
	New roofs				Existing roofs				Podiums				
MasterSeal Roof 3000			●	●			●	●			●	●	
MasterSeal Roof 3500	●	●			●	●			●				
MasterSeal Traffic 2100 HD													●
MasterSeal Traffic 2500 HD										●			●



Master Builders Solutions from BASF for the Construction Industry

MasterAir®

Complete solutions for air entrained concrete

MasterBrace®

Solutions for concrete strengthening

MasterCast®

Solutions for the manufactured concrete product industry

MasterCem®

Solutions for cement manufacture

MasterEmaco®

Solutions for concrete repair

MasterFinish®

Solutions for formwork treatment and surface improvement

MasterFlow®

Solutions for precision grouting

MasterFiber®

Comprehensive solutions for fiber reinforced concrete

MasterGlenium®

Solutions for high performance concrete

MasterInject®

Solutions for concrete injection

MasterKure®

Solutions for concrete curing

MasterLife®

Solutions for enhanced durability

MasterMatrix®

Advanced rheology control for concrete

MasterPel®

Solutions for water tight concrete

MasterPolyheed®

Solutions for mid-range concrete

MasterPozzolith®

Solutions for water-reduced concrete

MasterProtect®

Solutions for concrete protection

MasterRheobuild®

Solutions for high strength concrete

MasterSeal®

Solutions for waterproofing and sealing

MasterRoc®

Solutions for underground construction

MasterSet®

Solutions for set control

MasterSure®

Solutions for extraordinary workability retention

MasterTop®

Solutions for industrial and commercial floors

Master X-Seed®

Advanced accelerator solutions for concrete

Ucrete®

Flooring solutions for harsh environments

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