Spring 2010
Volume 3, Issue 1

BituNil Highlights

News from Egypt's leading Modified Bitumen Membranes Manufacturer-Bitunil S.A.E.

Special Interest Articles:

- New BituNil-IKO product range.
- Low slope roof Design considerations.
- Steel Deck re-habilitation.

Individual Highlights:

IKO Single Ply: Now available at BituNil

Diverse Colors

BituNil is launching "BituNil-IKO Single Ply" products into the Egyptian market. **BituNil-IKO Single Ply** offers a range of polymeric single ply roofing systems, incorporating all of the components required to deliver a complete high performance roofing system.

Seam Profile option

This comes as part of BituNil ambitious plan to expand its product range and offer a diversity of roofing and waterproofing systems and complimentary products along side its modified bitumen membranes to accommodate different designs and projects needs.

Curved Roofs

BituNil now carries IKO's PVC "ARMOURPLAN" Product range, in addition to the latest polymer technology TPE "SPECTRAPLAN" product range.

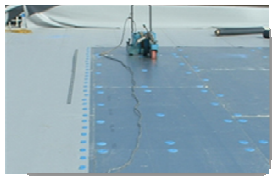
The New PVC & TPE "BituNil- IKO" Product Range

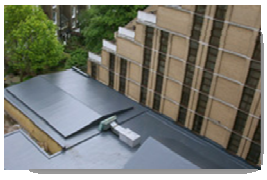
The systems are well known for their sleek attractive finish, rapid clean installation, design flexibility and easy repair and refurbishment, UV stability and fire retardant properties. It is also available in light reflective colors to promote energy efficient construction.

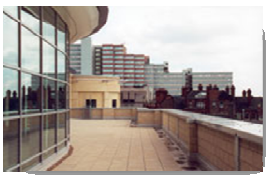
The ARMOURPLAN PVC range also offers the established advantages of PVC as highly resistant to chemical and industrial atmosphere, resistant to bacterial growth and to root penetration, and its ability to retain its flexibility and physical characteristics in well below zero degrees atmosphere.

The SPECTRAPLAN TPE range is based on a new generation of polymers (Thermoplastic Elastomers) which is 100% recyclable into primary products, can be welded over a wide range of temperatures, is environmentally friendly (no plasticizers, heavy metals, or ozone depleting substances), is highly elastic like EPDM, is compatible with most construction materials (Polystyrene & bitumen included), and have excellent aging characteristics.

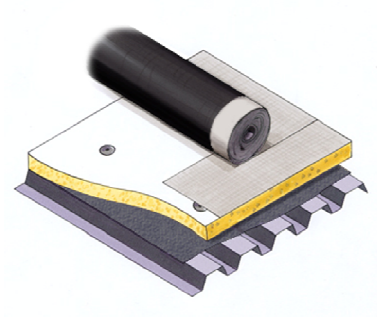
BituNil customer service is ready to respond to all inquiries regarding the new BituNil-IKO single ply range, available for Egypt, Libya, Morocco, and Mauritius.

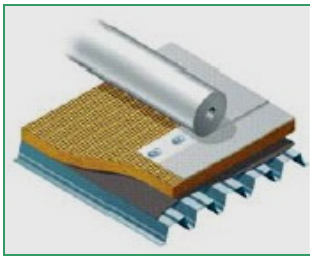






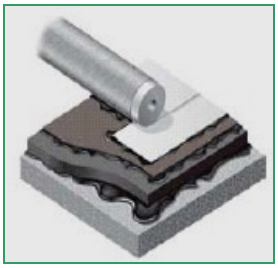
Typical Single Ply Systems





Mechanically Fixed

Reinforced membrane for mechanically fixed roofing systems



Adhered

Membrane with polyester fleece-back for adhered applications

Balasted

Reinforced membrane for loose laid roofing systems with ballast e.g. green roofs

Low Slope Roofing Design Consideration

With the availability of so many different types of roofing systems, a designer choice is guided by the following considerations

1- Selection of a locally available roofing technology where components and trained applicators are easy to find.

2- Selection of a system suitable to local climate, where:

- At extremely cold climates a ballasted or mechanically fixed system may be more suitable than a fully adhered system where hot asphalt or adhesives need additional precautions in cold weather application.
- At high wind regions fully adhered systems may be more suitable where wind uplift stresses are distributed on whole roof instead of concentrated at fasteners locations.

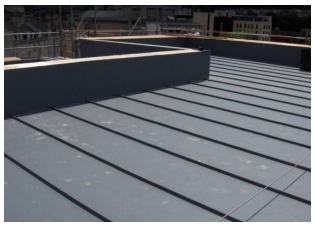
3- Curved roofs and roofs with large slopes do not easily lend themselves to hot asphalt or torch application. Single ply membranes are a more suitable choice.

4-Membranes recommended for application on industrial roofs or commercial kitchens are subjected to chemical environment on the roof and must have evidence of compatibility with such environment, furnished by the manufacturer.

5- Although initial system cost is important, the long term life cycle cost of roof system should not be overlooked.

6- Roof Warranty: With more than one suitable roofing system choice, a manufacturer warranty will impact system choice.

7- Additional characteristics of roofing assembly such as compliance with fire retardant UL tests, wind uplift and hail impact resistance FM test will all have an influence on designer choice.



Adhered System

Ballasted System

Mechanically Fastened System

BituNil Celebrates Its New ISO Certificates

BituNil has celebrated its first surveillance of **ISO 9001: 2008 quality management system** comprising a set of frameworks to establishing and carrying out its business activities associated with **Quality**.
It has also celebrated its new ISO certificate achievements :

-**ISO 14001 Environmental management system**
It aims to minimize harmful effect on the environment caused by the company and its activities.

-**ISO 18001 Occupational Health & Safety Management System**
It enables the company to develop and implement a policy to achieve sound occupational health and safety performance by controlling OH & S risks.

Satisfied customers come back.

Exhibitions: ROOF INDIA 2010- Chennai, INDIA

The three day event featured more than 120 national and international companies showcasing the latest roof systems, architectural cladding, vegetative roofs, waterproofing, thermal insulation, pre-engineered buildings and more.

BituNil is a loyal participant to the show,

Its booth is an attraction to consultants, engineers, and roofers interested in the latest that the roofing industry has to offer.

Meetings with BituNil key clients from India has been scheduled during the event, discussing future projects and cooperation plans.

BituNil brand is well established in the Indian Markets, due to the efforts of BituNil India local office and its representatives.

BItuNil Booth at Exhibition

ROOF INDIA 2010, 23- 25 April

Seminar at Research Center: Tanta University

TANTA University

BituNIl has participated, as one of the main sponsors of the event held at the center for research and engineering consultations, TANTA University, May 2010.

BituNil main objective was to raise awareness of the importance of proper selection of roofing and waterproofing systems, and highlight its wide selection of product range. .A 20 M2 display area was dedicated to BituNil at a strategic location, leading to the conference hall.

The booth area was admired by the faculty dean, as well as the head of research center, Dr. Emad Othman. It has attracted architecture professors, and consultants, as well as engineering students interested to enhance their knowledge of roofing and waterproofing and what BituNil has got to offer.

BituNil held a brief presentation received by a large audience of more than 700 attendees, mainly of engineers, consultants of different disciplines, members of major contracting companies, and engineering students.

The successful event brought together BituNil's sales and technical team with consultants and designers, giving the opportunity for future cooperation plans.

Conference Hall with more than 700 attendees

Audience of consultants, engineers, and students.

Presentations by construction material manufacturers

Steel Deck Roofing Re-habilitation

A common problem with old installations of Steel structures utilized as storage areas, manufacturing plants or other industrial uses, is water leaks due to deterioration at fasteners penetrations.

In an attempt to re-habilitate the steel deck roof and avoid its replacement, a roofing system may be installed on top of the existing steel deck.

BituNil modified bitumen re-cover system main components are:

Covering boards: To provide a level surface to receive the waterproofing system, and are recommended to be of non-combustible material such as Gypsum boards, Mineral fiber boards, or Perlite boards, with a minimum thickness of 2.5cm.

Waterproofing system: Consists of a two layer system of modified bitumen waterproofing membranes with polyester/ fiberglass reinforcement.

The top membrane layer is self-protected with mineral granules.

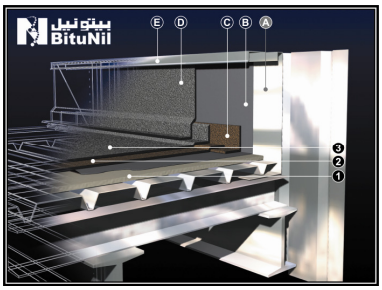
Installation:

Covering Boards:
It shall be fastened in place to the roof deck using appropriate fasteners and plates.

Roofing Membranes:

Base Layer: Shall be fully adhered by torch welding to covering boards. For non-torch-able board surfaces, membrane shall be mechanically fastened to steel deck through covering boards.
Fastening pattern and density shall depend of wind uplift forces. The latter is defined by local statistical data on different geographical zones.
Fasteners and plates shall comply with membrane manufacturer requirements.

Top layer (Mineralized): Shall be fully adhered by torch welding to base layer.
Base flashing shall be mineral granule surfaced and shall be fully adhered to primed vertical elements.



Horizontally: **Vertically:**

1.Covering Board **A. Metal Curb**
2. MBM Base layer **B. Primer**
3.MBM Self-protected (Mineral) Top layer. **C.Reinf. Strip**
D. Base flashng
E. Metal Coping

Non-Insulated Roofing System on Steel Deck (RM20)

Most Common Roof System Design Mistakes

Common roof system design mistakes, as per roofing professionals are:

-Specifying a roof system simply because it worked on another building. All, too often specs are seen that are re-prints of the same specification a designer has used on the past several buildings he designed, when what is needed is thorough consideration of criteria such as structural, and architectural components, location, height, and interior usage, all of which play part in roof system specification that will provide satisfactory performance.

-Designing a roof drainage system that does not eliminate water-ponding. A common situation is when a structure is sloped and the low point of a roof deck rests on a structural member. Designers and contractors need to make appropriate decisions concerning drainage before construction begins

-Specifying a roof system based solely on a manufacturer warranty. Designer and owners need to remember that warranties are for the most part, a list of exclusions that limits a manufacturer liability in case of a claim. To specify a roof system based on a 10 or 20 years warranty ignores this reality.

-Specifying the "newest" material on the market, or allowing use of untested products. A successful roof system is tested, changed and improved as a result of in-place performance. Specifying the "newest" on the market, though not necessarily a wrong approach, increases the potential for problems and liability.

BituNil Offers Support during Design and Execution

BituNil

50 Al Khalifa Al Mamoun,
Roxy, Heliopolis

PHONE:
(02) 24511194

FAX:
(02) 24511198

E-MAIL:

tech.support@bitunil.com

Aiming to strengthen the concept of the "RIGHT MATERIAL FOR THE RIGHT APPLICATION", BituNil targets building bridges of cooperation with consultants/ designers at the early stages of projects design. BituNil technical specification dept. offers its assistance in proposing the suitable waterproofing system specifications for projects under varying structural & environmental conditions, in addition to in-situ backup for clients at the execution stage, to overcome problems that may arise during application phase. The department lends its assistance through well experienced technical staff in possession of extensive knowledge of the latest in the roofing industry as well as application experience with different roofing & waterproofing systems.

Projects References

Future University Phase II

Commercial Building

Al Massrawia Complex

About Our Organization...

The Nile Waterproofing Materials Company S.A.E., **BITUNIL**, is the product of experience, prudence and knowledge.

The BITUNIL plant is built over an area of 20,000 square meters in Al Max Alexandria Port. The production plant is state of the art for the fabrication of modified bitumen membranes, and is fully equipped to manufacture quality products that comply with internationally recognized standards.

We're on the Web!
See us at:
www.bitunil.com