

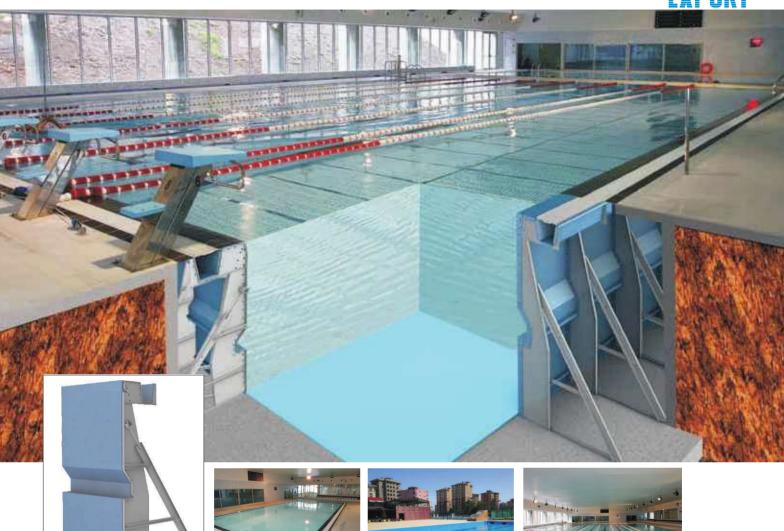
# Dynamic Panelpool



PUBLIC SWIMMING POOLS







### PUBLIC SWIMMING POOLS

This technology results from the idea and necessity of a swimming pool which can be functional, easy to install, affordable, capable of providing maximum comfort, able to adequately respond to the challenges of traditional pools, and incorporating aesthetics and high quality finishings.

The Dynamic Panelpool structure is more affordable, efficient, and environmental friendly than traditional structures. This is an innovation focused on public swimming pools, which is an excellent alternative to traditional concrete structures and other pre-fabricated structures.

This is a patented modular system of thick PVC coated galvanized steel panels – Prima Steel – which is adequate for competition, recreational, fitness, physiotherapy, thermal and other types of pools.

With a Dynamic Panelpool structure it is possible to build pools for multiple purposes, such as olympic and semiolympic, and adequate for hotels, camping parks, waterparks, gymnasiums, and many more.







PRIMA STEEL is a 2 mm thick galvanized steel, with a PVC coating on both sides, one of which particularly thick. PRIMA STEEL was tested and certified by LNEG, according to the norm NP EN 9227.

The innovative PRIMA STEEL steel, when in highly aggressive environments, is up to 10 times more resilient than traditional galvanized steel.

Our galvanization is achieved by submerging the steel in a hot chemical mixture of aluminum, zinc and magnesium, a process done by one of the world's biggest steel producers.

The excellent chemical metal coating composition, combined with the high thickness PVC coating, ensures a superficial layer that protects the panels against corrosion and long term wear in a much more efficient way than traditional galvanization processes.

This new galvanization was optimized to provide the best results in terms of resilience and corrosion in highly aggressive environments and atmospheres with the presence of chlorides and ammonia.

Nowadays, due to its high quality, this is one of the best alternatives to the postgalvanization process, aluminum, and stainless steel.

DUE TO ITS COMPOSITION, THIS NEW STEEL IS FOR THE CONSTRUCTION OF SWIMMING POOLS, IS NOT ONLY HIGHLY PROTECTED AGAINST CORROSION BUT ALSO HAS SELF-REPAIR CAPABILITIES WHEN PERFORATED.

AN EXCELLENT ALTERNATIVE TO POST-GALVANIZED, ALUMINIUM AND STAINLESS STEEL.

### **TECHNOLOGY**



#### STEEL

The excellent chemical metal coating composition, combined with the high thickness PVC coating, ensures a resilience up to 10 times higher than traditional galvanized steel. It is an exceptional alternative to aluminum and stainless steel, even in the most aggressive fields, including those with high water levels.

Galvanization

PRIMA STEEL



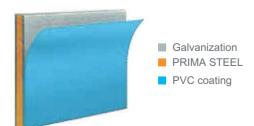
### EN 9227



**PVC** 

The adequate swimming pool waterproofing is achieved by the panel's PVC coating and the reinforced liner membrane at the bottom of the pool. This membrane complies with the norm EN 15836-2, has a high resistance to UV rays and salted water or water with chlorine, has a pleasant touch and is easy to clean.

Presently, the reinforced membrane (or Liner 150/100) is unquestionably the best solution available in the market for the waterproofing of pools, no matter the purpose of their use or the climate of the area.







### **ADVANTAGES**



#### **WARRANTY**

Dynamic Panelpool swimming pools, built with the Prima Steel panels structure, has an almost unlimited durability due to the quality of its materials and the highly advanced technical characteristics of PVC coated steel panels modular structure. This is the reason why we supply these pools with a 30 years warranty.



#### **FLEXIBILITY**

Dynamic Panelpool swimming pools can be easily adapted to any kind of project, being it simple or complex, and without limits in terms of shape and dimension. The requirements of architects, designers, and developers can, therefore, be fully respected without limiting their creativity.



#### **AESTHETICS**

We give maximum importance to details and perfection of finishing. We, therefore, make available a wide range of accessories in ceramics, glass mosaics, and 316L stainless steel, all adequate for use in water environments with presence of chlorine, which can respond to the needs and preferences of all our customers. Hence, the Dynamic Panelpool structure can adapt to all types of demands.

### ADVANTAGES





#### COST

The investment in a Dynamic Panelpool swimming pool comes with a double advantage in terms of cost: the first at the moment of construction; the second in the middle and long run, as this product will not require the expensive and profound maintenance investments that traditional concrete pools very often require. The reduced period of installation allows significant savings in labor costs, while the absence of fissures, common in concrete structures, and the water losses resulting from them, will never occur in this type of pool.



#### **ASSEMBLY**

The Dynamic Panelpool patented modular system allows an easy, quick, and precise assemblage of the structure, without the need of special tools or equipments. The modular panels, which are the walls of the swimming pool, are produced by automatic equipments, with CNC digital control, one of the most advanced technologies now available in the market.

The margin for error is basically inexistent.



#### **MAINTENANCE**

As opposed to traditional swimming pools, the Dynamic Panelpool swimming pool does not require much maintenance. The structure is extremely robust but, at the same time, it has a certain degree of elasticity. Completely waterproofed, the pool has

The structure is extremely robust but, at the same time, it has a certain degree of elasticity. Completely waterproofed, the pool has no dimension variations, does not open fissures, is easy to clean, and resists UV rays and water with chlorine.



### **MODELS**

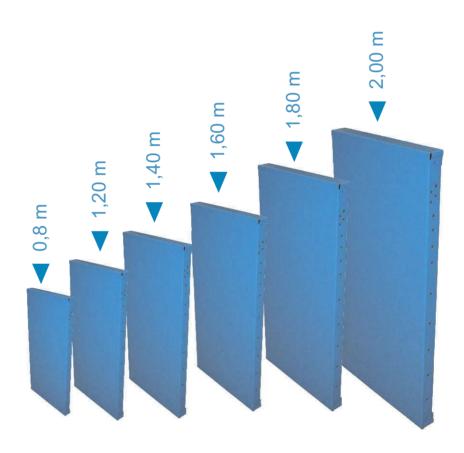
The Dynamic Panelpool swimming pools have a modular design, so that all independent panels can be combined to create the pool's structure. This feature allows the construction of pools of any dimension and shape. The pressure the pool needs to withstand is equally distributed among all panels. The assembly of the pool is no more than the union of panels until the desired dimension is achieved.

#### Possible combinations

A 3 meters deep pool for synchronized swimming is achieved with the union of a 1,8 meters and a 1,2 meters high panels. The same way, a 5 meter deep pool for diving will require a 2,0 meters, a 1,8 meters and a 1,2 meters high panels. Other combinations are also possible.

#### Width possibilities

The panels can be manufactured with different widths, according to the customer's needs, up to a maximum width of 1,0 meters.



	Available depths
Panel height	Type of pool
0,80 m	Children's pool
1,20 m	Leisure pool
1,40 m	Leisure pool
1,60 m	Leisure pool
1,80 m	Swimming pool
2,00 m	Water polo pool
3,00 m	Water polo pool

### **ASSEMBLY**

## BASENHURT EXPORT

#### 1 - BASE

The base should be built in concrete, perfectly leveled, and with the thickness adequate for the dimension of the pool. In alternative, any other appropriate type of platform can be used, when the pool is not meant to be permanent.



#### 2 - BASE STRUCTURE

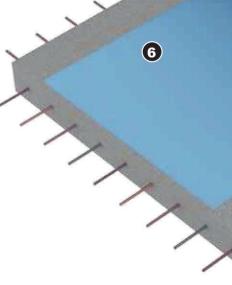
The base structure defines the perimeter of the pool and is made of steel modules which are aggregated to one another. This structure will then hold the panels of the pool. Fixed to the base with the appropriate fixing equipment, this structure ensures leveling to the millimeter



#### 3 - WALL STRUCTURE

The wall structure is composed of robust Prima Steel PVC coated galvanized steel panels, aggregated among them and to the base by stainless steel screws. Simultaneously strong and elastic, the Dynamic Panelpool structure is perfect for all types of climate and rough grounds, even in seismic activity events.

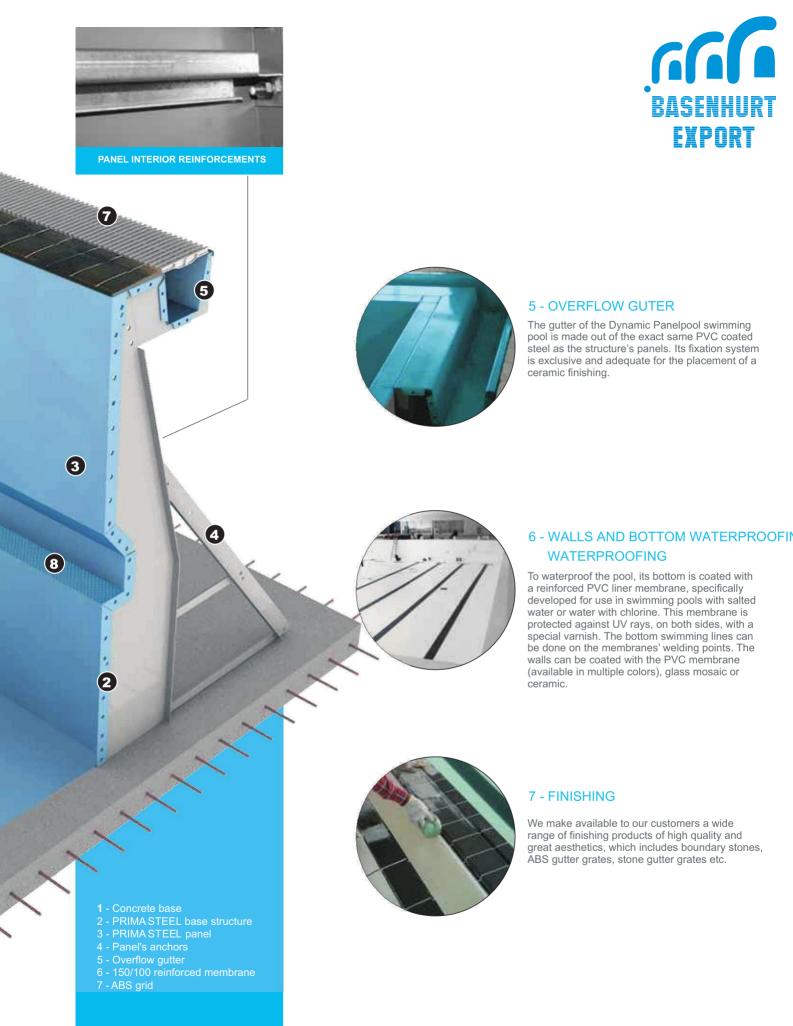


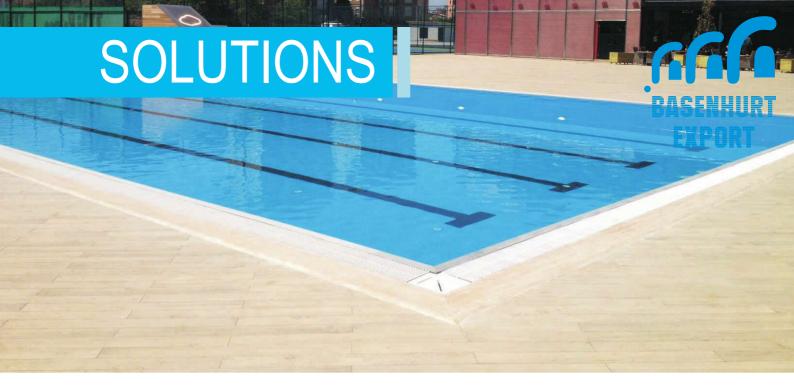


#### 4 - ANCHORING

In all joints of the panels, two highly resilient anchors guaranty the structures robustness. One master anchor unites the panels and is fixed to the base and two supporting anchors are just fixed to the base. The master anchor comes with a leveling system.









#### SWIMMING POOL WITH SKIMMER





SWIMMING POOL WITH OVERFLOW GUTTER ON BOTH SIDES





### ACCESSORIES





#### SWIMMER STEP

Imperative for pools over 2 meters deep, the swimmer step can be incorporated into the Dynamic Panelpool structure. It can be coated with ceramic or anti-slippery PVC membrane.

### CERTIFICATES

The swimming pool's quality control is guaranteed by a team of specialized technicians.

The steel panels are certified according to the norm UNI EN 10142.

The galvanization process is certified according to the norms EN ISO 1461, DIN 50.075/6, and ASTM-153. The reinforced membrane is produced according to the norm EN 15836-2.

Tested in two independent laboratories (LNEG and LMR) and exposed to severe chemical aggressions and to saline fog in a chamber, the PRIMA STEEL structure maintained its integrity and proved to be one of the most resilient steels used today for swimming pools construction.







