

ICE SLAB RENOVATION



IHF Ice Hockey WC 2018, Denmark - supplied by AST

SPEEDY - EFFICIENT - ADVANCED ECOLOGICALLY SUSTAINABLE

The AST company group - founded in the late 80's - has been a well established internationally operating leader for decades. With several subsidiary companies in Europe, US, Canada, Near and Far East, AST is proud being first choice supplying ice rink equipment for World and/or European Championships (e.g. ice hockey, curling, figure-, downhill and speed skating). AST's profound experiences and know how in ice technology and adjacent business has year by year led to a great number of successful ice arena renovation projects.

THE AST EPDM ICEMAT SOLUTION

Instead of removing the damaged concrete slab and installing a completely new refrigerated slab, it's much easier, more economic and definitely faster to install an AST-EPDM system and to be able to restart the cooling system only 3 weeks from shutdown.

With the AST-EPDM System, the entire existing cooling liquids can be re-used. It doesn't matter if it's Ethylene or Propylene Glycol or Brine. The adaptation of the header pipe system is easy. These are the main stages of rebuilding;

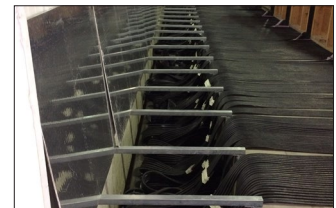
- New system with new headers are connected at the beginning of the former headers
- Dashboards raised approx. ¾ inches
- AST EPDM absorber pipe system is installed on the existing surface and pulled underneath the board.

INSTALLATION METHODS

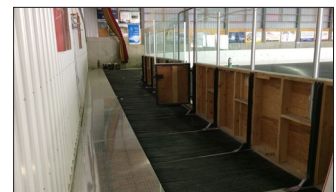
The headers can either be mounted along the long but also the short side. Anyway - the final installation method will depend on the specific conditions inside the arena.

The headers can be mounted in a collector channel or fixed to a wall. In case the arena is operated multifunctional, the EPDM absorber pipes can easily be dismantled and stored in the collector channel within two days. So the arena will be ready for other activities promptly.

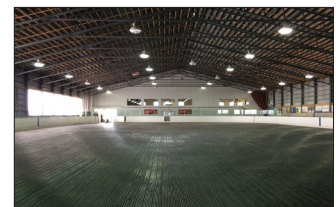
Afterwards the re-installation of the EPDM absorber pipes will take another two days. The most suitable installation method of the collector pipes - as mentioned above - will be based on the actual conditions inside the arena; there are a several possibilities to adapt. Following page will display the most frequent installed solutions.



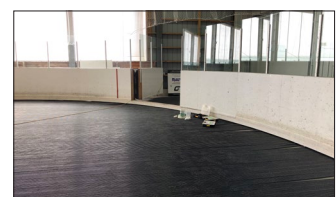
Collector Channel (open) for headers



Collector Channel (closed) for headers



AST EPDM system on a concrete slab



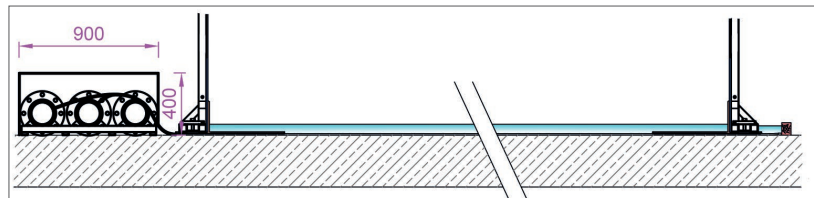
AST EPDM system underneath the boards

POSITIVE EFFECTS & TECHNICAL OPTIONS

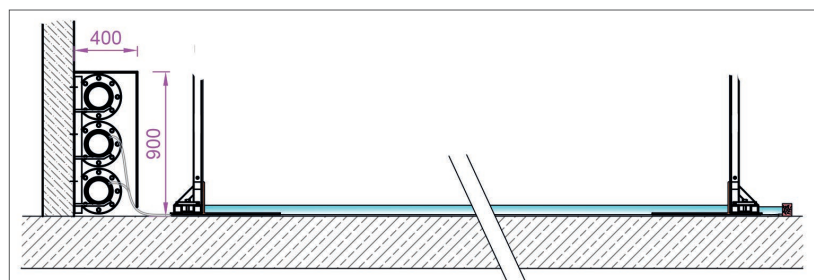
No matter which of these below sketched installations finally will fit into your arena perfectly - the main advantages are:

- substantial saving as an expensive concrete slab removal resp. concrete layer rebuild can be avoided
- time out of operation of the arena reduced to a minor period (approx. 3 weeks)
- you'll keep your profit loss definitely under control
- the future energy consumption will get reduced
- the system is highly efficient due to large temperature transmission area and position of the tubes directly in the ice and close to the surface
- robust and not affected by movements in ground or old base plate
- no additional replacement invests such as chiller, dashboards etc. needed

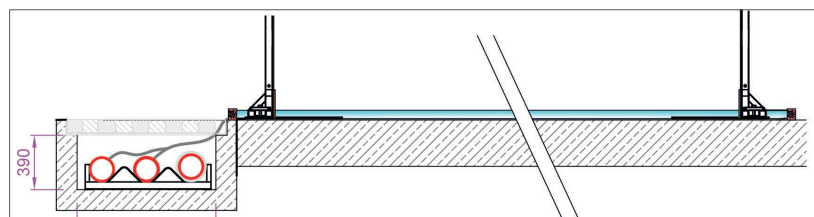
Headers mounted on the floor



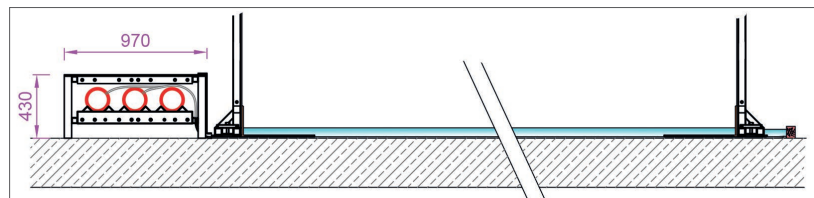
Headers mounted on the wall



Headers stored in an AST collector channel



Headers in AST SkateBox to achieve a fully mobile ice rink



NEXT STEPS

Providing your actual technical details and drawings of your arena will help us to elaborate an individual non-binding offer. So please address all these informations (ice rink measurements, operating chiller, refrigerant, dashboard details) to:

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