

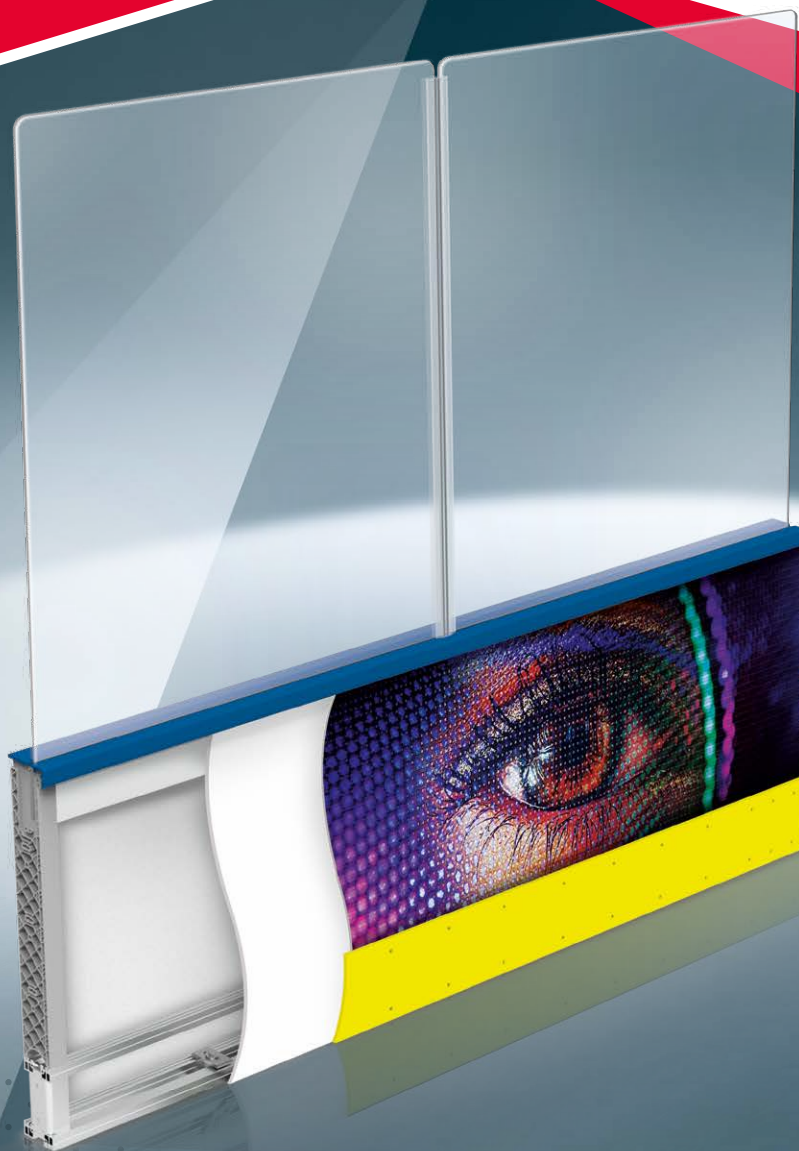
Technical data sheet

FLEXIBEL
DASHER BOARD SYSTEM

engo

ice arena equipment

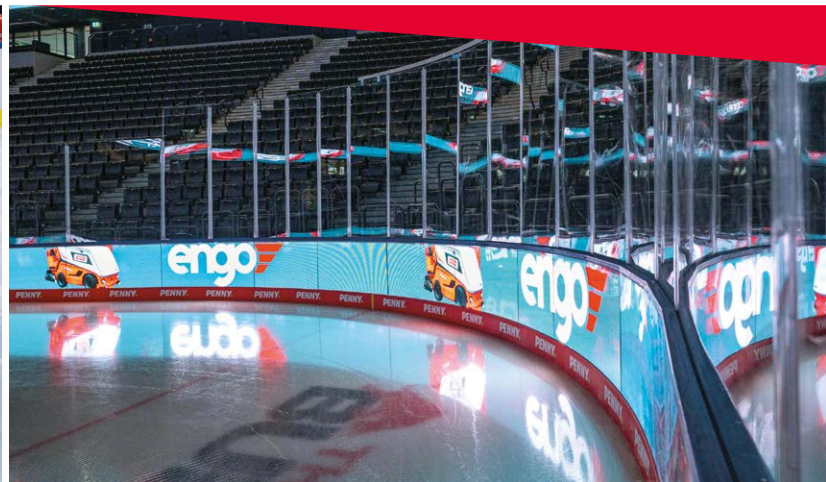
ENG



FlexBoard **MOTION**

DESIGNED FOR
HIGH-LEVEL MULTI-PURPOSE
ICE STADIUMS

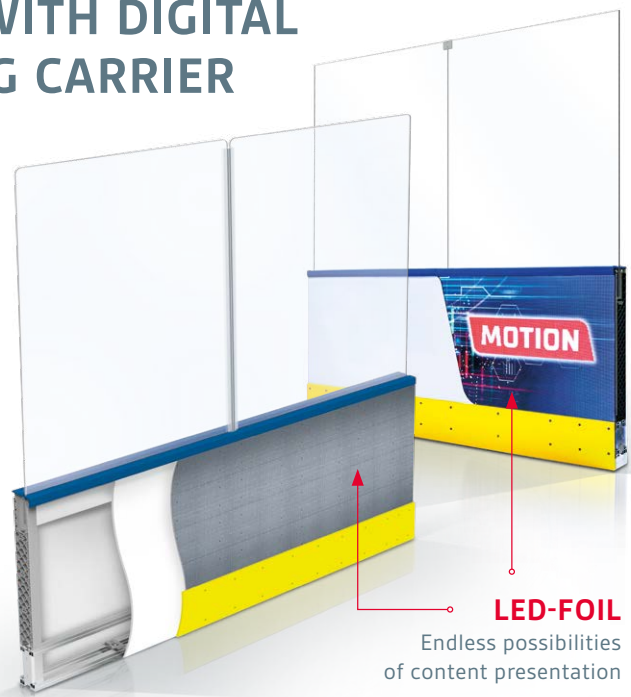
2025-V03



INNOVATIVE ADVERTISING WITH DIGITAL ANIMATED LED ADVERTISING CARRIER

WHY CHOOSE AN LED DASHER BOARD:

- **Advanced technology:** We have not only developed the mechanics of the dasher boards but also invested significantly in the LED panels.
- **Ultra-slim and ultra-light design:** With a thickness of just 8mm (compared to 80mm in traditional solutions) and a weight of 1kg (vs 7kg for conventional video wall elements), our dasher boards are easy to handle and offer storage benefits, especially in multi-purpose arenas.
- **Superior image quality:** We provide high resolution, seamless displays with no visible black gaps, and excellent contrast, developed in collaboration with Red Bull and DEL.
- **In-house development:** The panels are designed to fit perfectly with our dasher boards.
- **Customization options:** We offer features like impact sensors, such as those integrated for Red Bull, allowing for greater interactivity and customization.





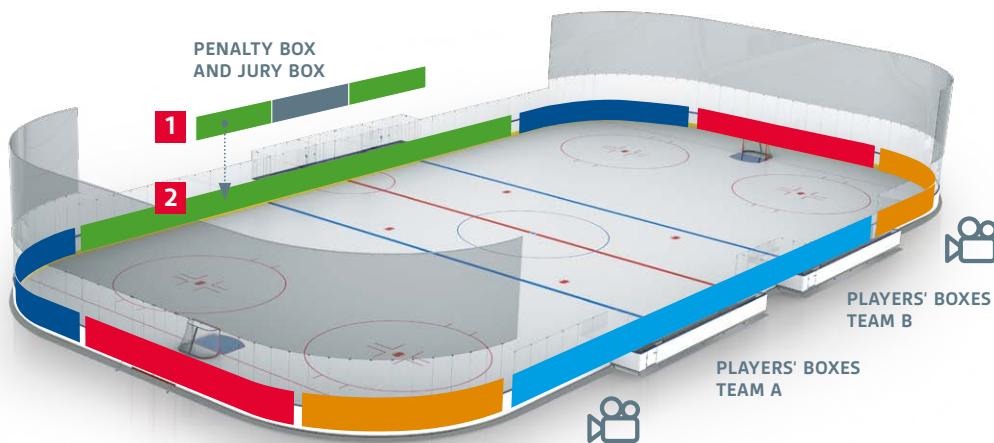
MAXIMIZE REVENUE WITH DIGITAL DASHER BOARD ADVERTISING

Every multi-purpose stadium offers the opportunity to generate significant revenue through dasher board advertising.

For instance, with 166 meters of analog advertising dasher boards, it's possible to multiply the rate per meter by X Euro, reaching a substantial amount per season. However, analog systems involve high costs and complex handling, limiting flexibility with long-term contracts.

The transition to digital dasher boards transforms this dynamic.

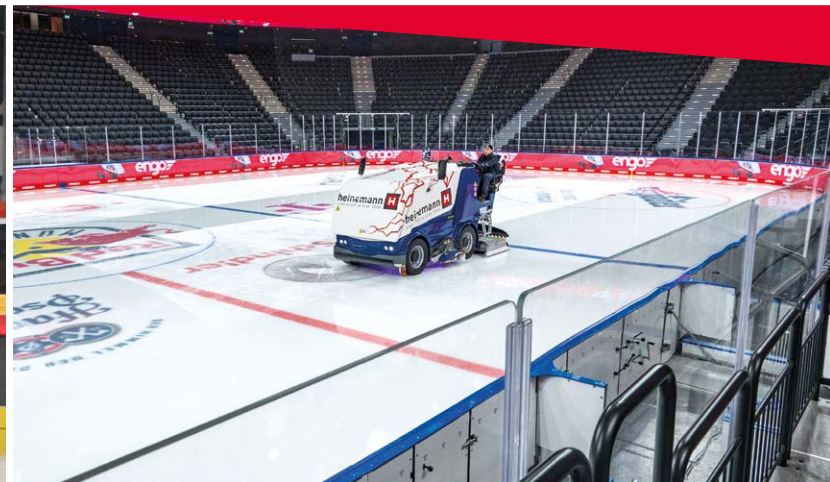
Engo's LED MOTION system replaces static ads with dynamic, customizable, and adaptable content for every event, sponsor, and audience throughout the season. This innovation allows the overall value per meter to multiply: with digital, the total revenue can far exceed that of traditional systems. With the ability to **switch sponsors instantly**, the work of marketing and sponsorship teams becomes much easier. Short-term contracts, event-specific agreements, or even partnerships with the visiting team's sponsors for a single game are now possible. In addition to enhancing **fan experiences** and multiplying sponsorship opportunities, the system delivers a **rapid ROI**, enabling further investments and innovations.



1 LED BOARDS MOTION
2.4 m long / plus >>>

2 LED BOARDS MOTION
360 degrees possible

VIP	advertising radius spectator view
BRONZE	advertising long side spectator view
SILVER	advertising short side spectator/TV camera view
GOLD	advertising radius TV camera view
PLATIN	advertising long side TV camera view



HIGH LED TECHNOLOGY FOR NEW SPONSORSHIP POTENTIAL

Digital, animated LED advertising captures the attention of both spectators and TV audiences. Studies show that it leads to longer viewing times and better recall compared to static print advertising. Additionally, digital LED banners can respond to on-ice action in real time, enhancing the entertainment experience during ice hockey games, ice galas, and figure skating competitions.

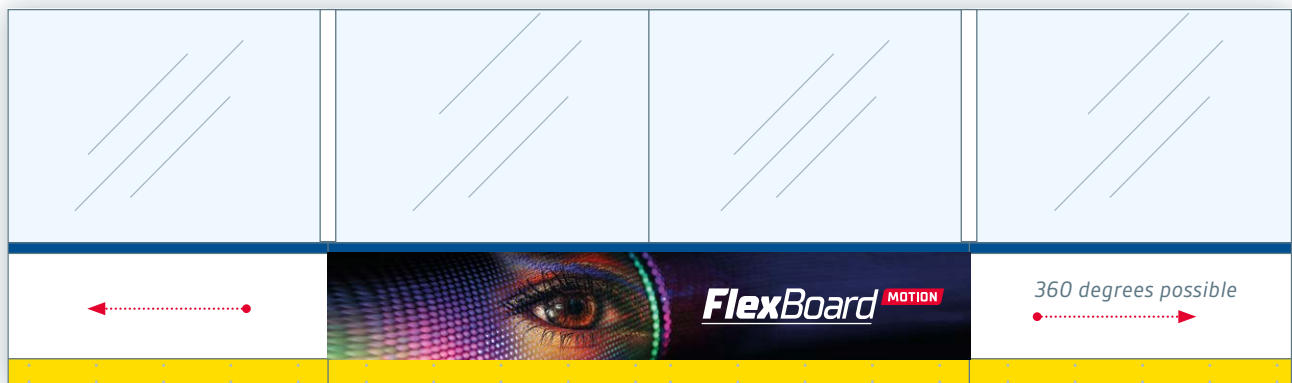
Example: Dasher board with animated digital LED-advertising








- 1) WELCOME
- 2) SPONSOR PAUSE
- 3) SPONSOR BREAK
- 4) HALF TIME
- 5) SPONSOR BREAK
- 6) PLAYING
- 7) POWER-BREAK SPOT

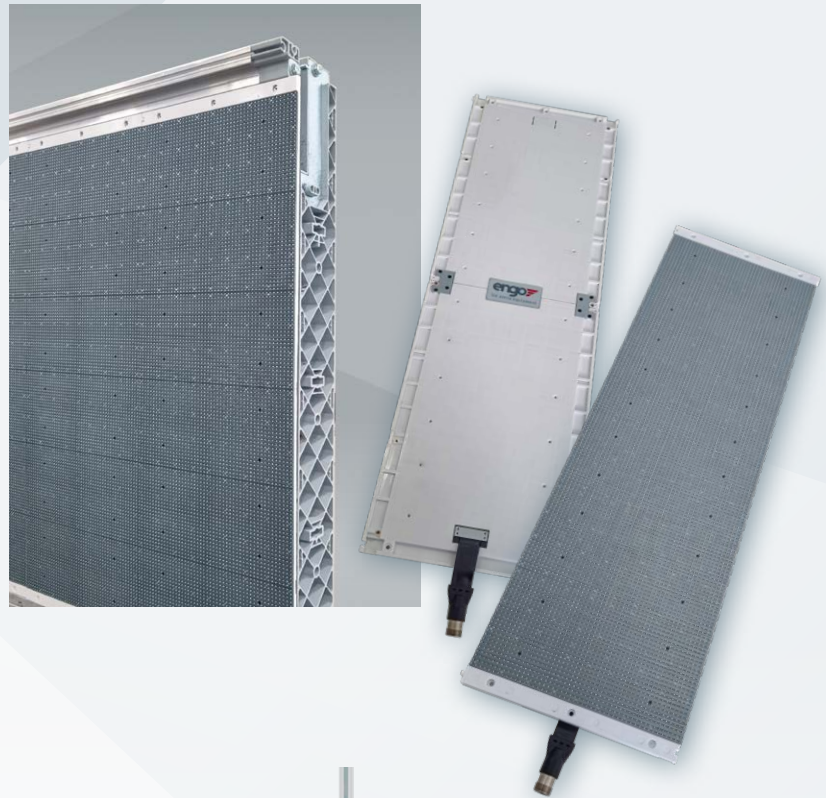
The advantages speak for themselves:

- Multiple sponsors alternating on the same space
- Quick and easy sponsor change with a few clicks
- Exclusively software and WLAN based
- The dasher board remains flexible in its structure
- Cold resistant up to -15° and non-condensing
- Show effect for all kinds of ice events
- Place it everywhere on your rink
- Remote access (mobile, desktop, laptop, ...)
- Compatible with all common standard video formats
- Daylight compatible for open ice rinks



DASHER BOARD WITH INTEGRATED LED FOIL

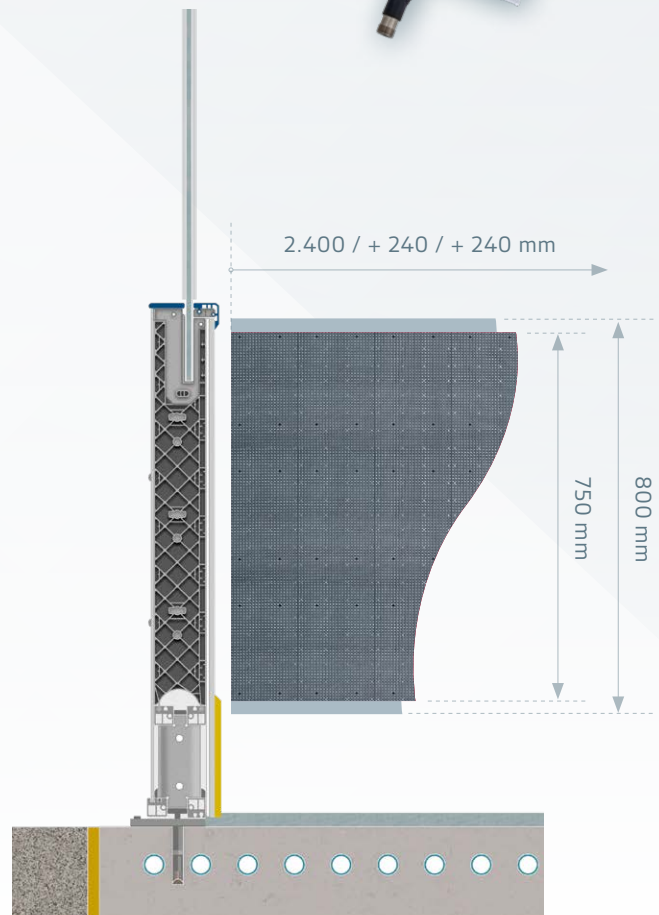
-  85W/m² dur.
-  -10--+60°C
-  1,200 cd/m²(NIT)
-  40.000/m²
-  to 2.800Hz

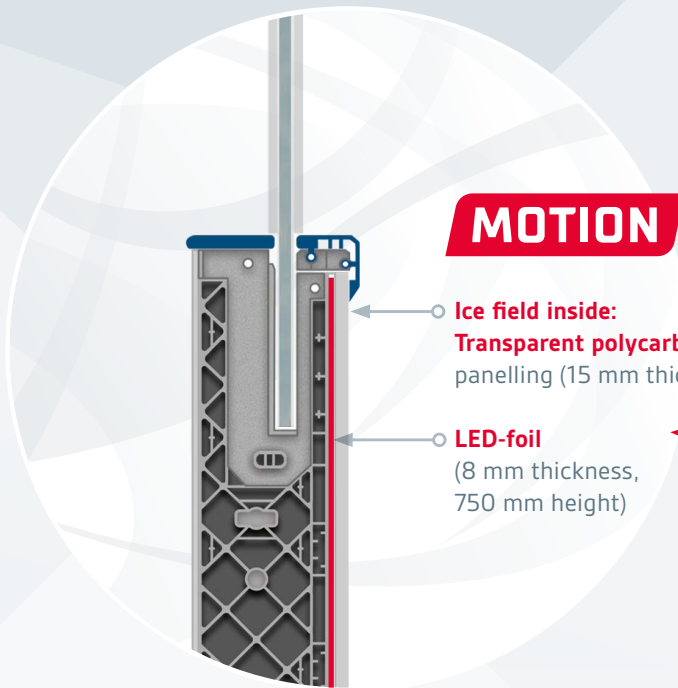


KEY FACTS

Technical specifications

TECHNOLOGY	full color, SMD 1818
PIXEL PITCH	5 mm
RESOLUTION (HXL)	48 x 150
PHYS. DISTANCE	P5 (high contrast)
HEIGHT ADVERTISING MEDIUM	800 mm
WIDTH STANDARD	2.400 mm
COLORS	16.7 million pixels (2600 - 9500)
LED LIFETIME RATING	L50 (50.000h)
POWER SUPPLY	5V DC/50 Hz
IP RATING	IP 42
INTERFACES	HDMI, DVI, SDI, DF
VIDEO OUTPUT	CAT6E < 100 m, M-Fiber ≤ 500 m

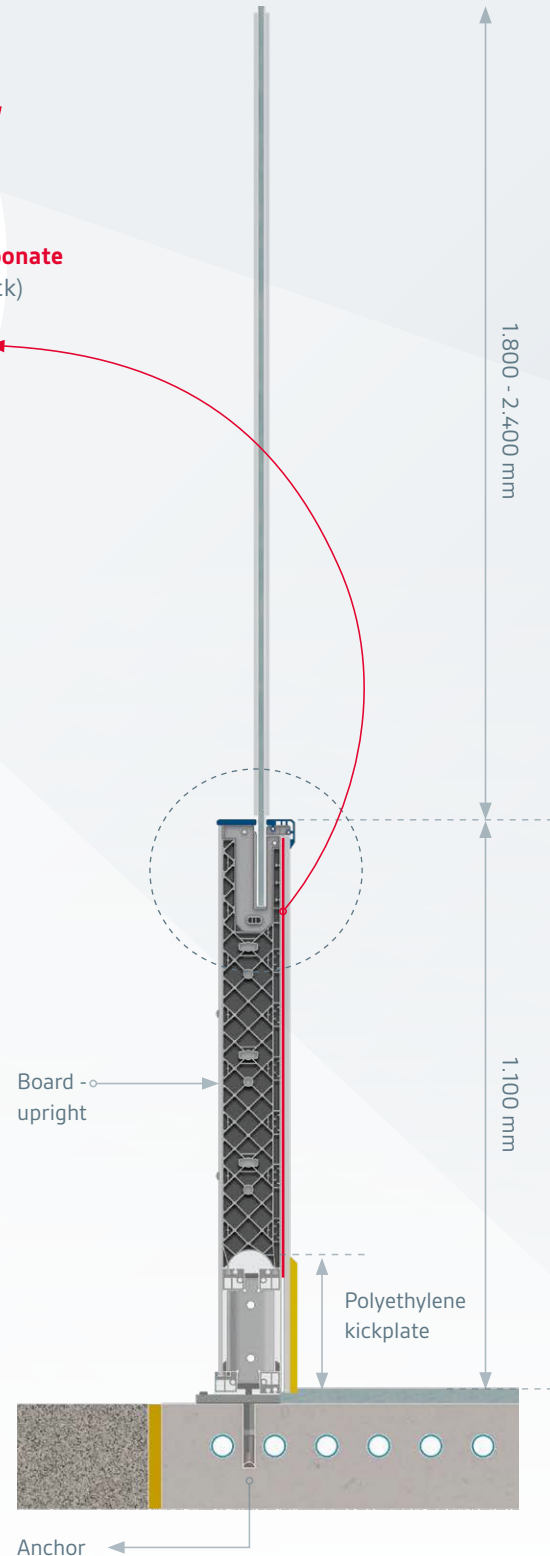




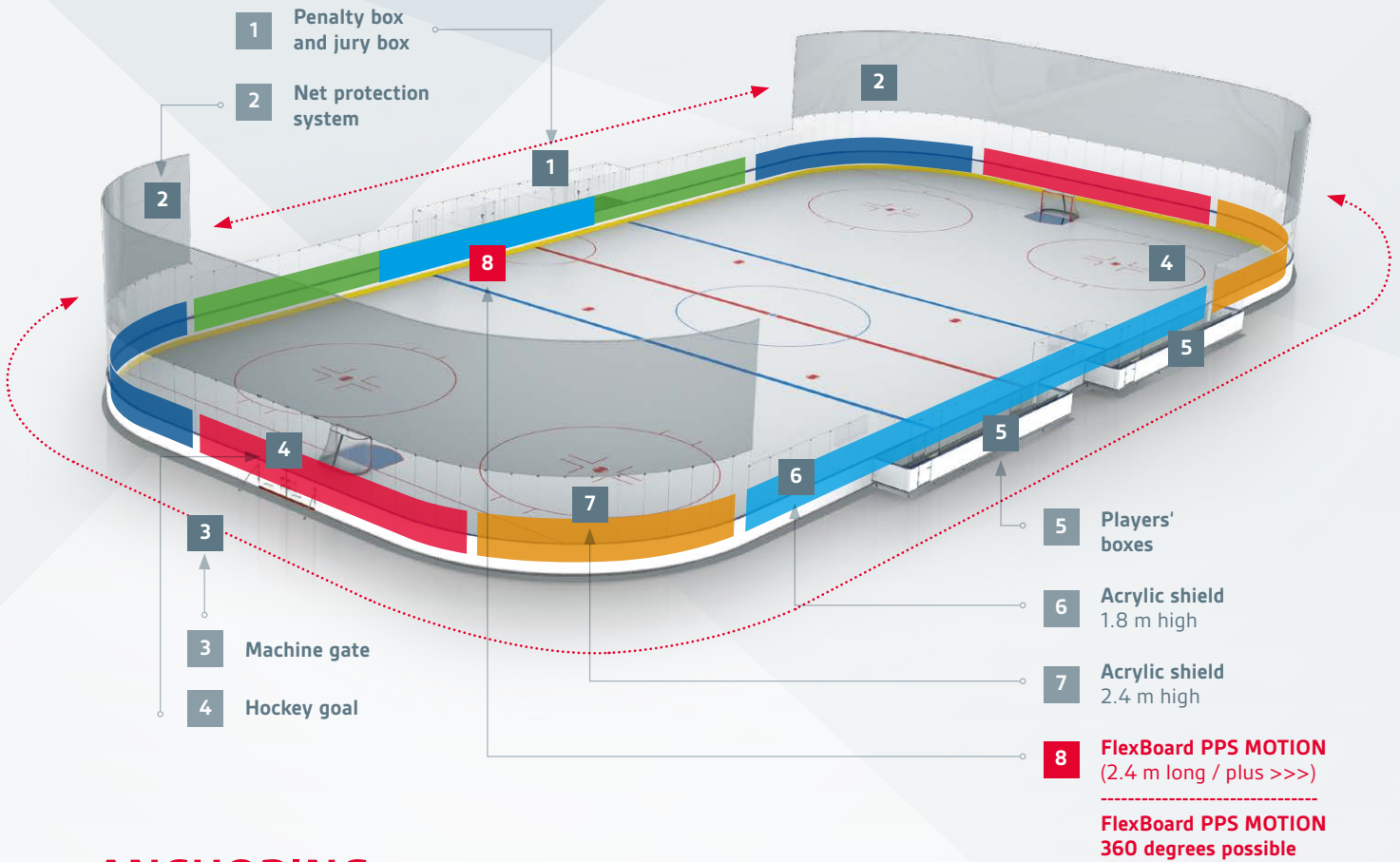
KEY FACTS

Support Board e.g. FlexBoard PPS

RULES STANDARD	IIHF
HEIGHT Single element	1.100 mm
LENGHT Single element	to 3.000 mm
ELEMENT RADIUS	7 to 8,5 m
FRAME CONSTRUCTION	aluminum with flexible fiberglass-reinforced plastic uprights
ANCHOR TYPE	different mounting options
INSIDE PANELLING	polyethylene / white
KICKPLATE	polyethylene / yellow
HANDRAIL	made of soft, blue polymer
ENTRANCE DOOR	from 0,8 m
MACHINE GATE WIDTH PER DOOR	on demand



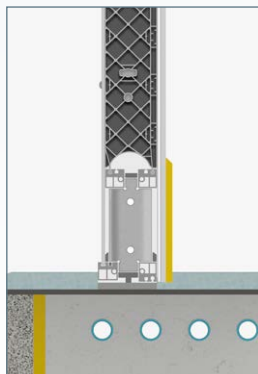
DASHER BOARD SYSTEM



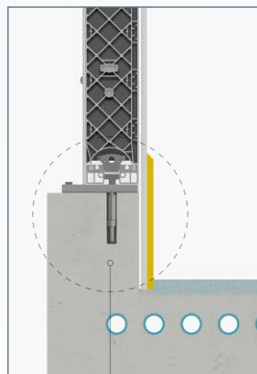
ANCHORING

Different installation possibilities

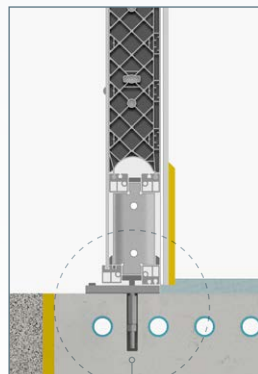
Installation into ice with steel plates



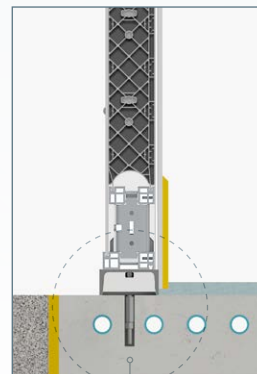
Installation system on a barrier



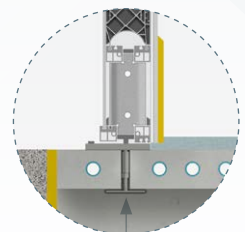
Immersed adhesive anchors



Anchoring system with ice dam



ALTERNATIVE:
Immersed steel rail in the concrete

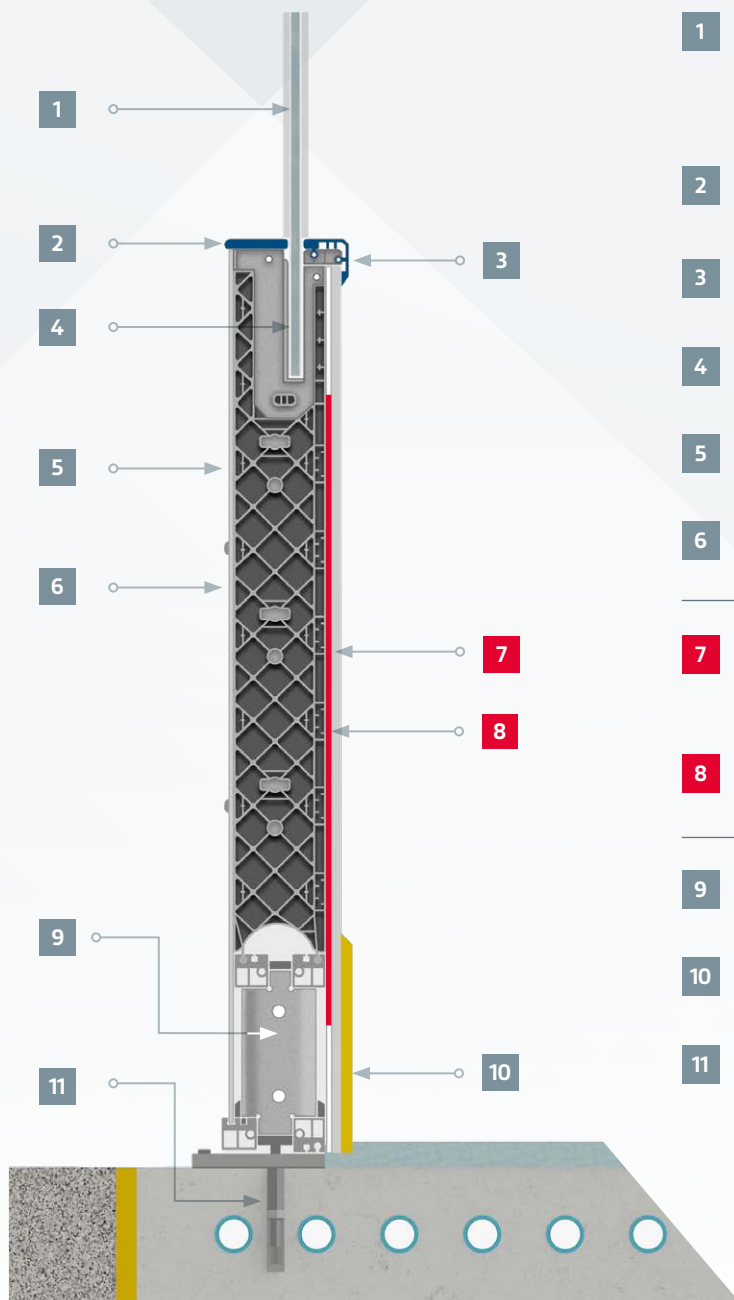


PLAYER PROTECTION SYSTEM

Flexibility for injury prevention

Due to the low installation depth, the dasher board construction remains completely untouched and therefore keeps its certifications in terms of flexibility and safety.

The LED-foil is covered with a transparent polycarbonate sheet of calculated thickness for protection.



- 1** **15 mm acrylic shielding**
with glazing posts, up to 2.400 mm high
(above the handrail) or as alternative
15/12 mm tempered glass shielding
- 2** **External handrail**
made of PE-HD
- 3** **Soft rounded handrail made of polymer**
in blue with air chambers
- 4** **PE fastening inserts**, compatible
with all types of glass shielding
- 5** **Flexible board-upright**
made of fiberglass-reinforced plastic
- 6** **Outside covering system**
made of PE-HD (10 mm thickness)

- 7** **Transparent inner cover**
made of polycarbonate
(15 mm thick)
- 8** **LED-foil**
(8 mm thick, 750 mm high)

- 9** **Base construction**
of aluminum
- 10** **Yellow kick plate** made of PE-HD (12 mm
thickness)
- 11** **Standard anchoring** with immersed
adhesive anchors in the concrete



Website: www.engo-ice.cn

Hotline: 4009001881

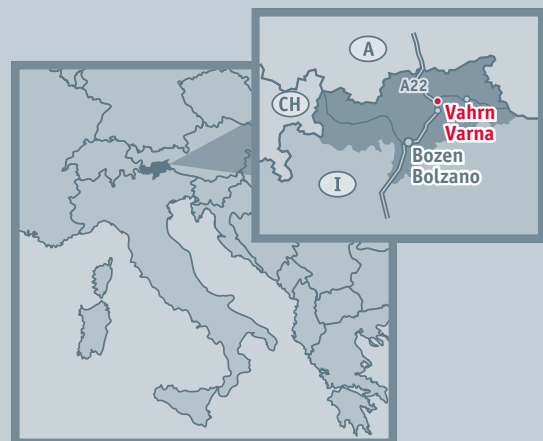


**ICE RESURFACERS
DASHER BOARDS
ACCESSORIES**

*Powerful technology for
smooth ice surfaces since 1979*

*Specifications are subject to change.
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please contact the Engo Company.*

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CERTIFICATION



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