

Weatherized Enclosures Suitable For Outdoor Installation

The weather resistant construction of Renkus-Heinz loudspeakers produced with the WR option allows them to be installed outdoors and in other harsh environmental conditions.

WR construction is the product of extensive Renkus-Heinz research to determine the maximum amount of protection that can be provided without compromising the loudspeaker's audio performance.

It has proven itself in hundreds of outdoor and high humidity installations around the world over the last 30+ years.

Applications

Any outdoor installation where the loudspeaker will be exposed to the elements, such as rain, sleet and snow.

Indoor installations in high humidity locations, especially ones with a high amount of chlorine in the air, such as indoor swimming pools.

Weatherized Enclosures

The exact nature of the treatment varies with cabinet types and construction. Enclosures constructed from multi-ply hardwood are finished with a shell of durable, gel coated fiberglass that is virtually impervious to the elements. The multi-ply hardwood is chosen for its durability and low moisture absorption characteristics. Iconyx extruded aluminum enclosures are finished in a durable paint.

The key design element is a 3-layer grille assembly that effectively protects the woofers and drivers from moisture entering the cabinet through the front grille. Together, the 3 grilles form a shield that retards the entrance of water into the enclosure.

All hardware is corrosion resistant stainless steel with all other metal parts nickel plated to withstand a 100 hour salt spray with chlorine test. Stainless steel grilles are available as an option and recommended for added resistance to long term damage in high chlorine atmosphere installations or in other extremely harsh environments.

All loudspeaker cones are treated to increase their resistance to moisture absorption and PC boards are coated to reduce moisture absorption and to prevent damage from chlorine atmospheres.

Both self-powered and non-powered conventional loudspeakers are supplied with "pig tails" for external connections and all connector plates are sealed to the cabinet with silicon caulking. Iconyx connection pockets are provided with protective covers and the covers sealed to the unit with silicon caulking.

WEATHER RESISTANT OPTION

WR

WEATHER RESISTANT OPTION



- **Weatherized Enclosures**

Offer maximum protection without compromising the audio performance; resist moisture penetration and damage from the sun's ultra-violet rays.

- **IP-55 Rating Under IEC Standard 529:1976**

Renkus-Heinz loudspeakers having been weatherized with the WR option qualify for a IP-55 rating under this international standard.

- **Weatherproof Finish**

Wooden cabinets receive a durable, gel-coated fiberglass finish that is available in black, white or custom colors.

- **Unique 3-Layer Protective Grilles**

Effectively retard the entrance of moisture into the enclosure, and protect against physical damage.

- **Corrosion Resistant Hardware**

All internal hardware is rust and corrosion resistant stainless steel and the steel grille is nickel plated to withstand a 100 hour salt spray with chlorine test. Stainless steel grilles are available as an option for extremely harsh environments.

Additional Information

Although Renkus-Heinz loudspeakers that have been weatherized with the WR option are weather resistant they are not totally "waterproof" or impervious to extreme weather conditions and reasonable care should be given to their installation.

This is especially true for self-powered loudspeakers and the amplifiers used in Renkus-Heinz weather resistant loudspeakers are coated to reduce damage from moisture absorption and to protect against corrosive atmospheres.

Nevertheless, in installations where the amplifiers will be directly exposed to snow, rain and sleet or in areas where extreme weather conditions such as intense thunderstorms or torrential rains are common additional protection is often required (rain hoods, for example). Please contact our sales engineering group to discuss your project if you aren't sure about the amount of protection required.

The life expectancy of weather resistant loudspeaker can be extended by following a few simple rules:

1. Angling the loudspeaker down at least 5 degrees from vertical.
2. Following good installation techniques (drip loops in all cables, for example).
3. Following a regular (at least yearly) preventive maintenance schedule and repairing any exterior damage, retreating all woofer cones with moisture retardant, checking for signs of rust, etc.
4. Leaving self-powered models "on" continually in high humidity and very cold areas.
5. If possible, choosing mounting locations that offer some shelter from rain or snow and / or providing additional protection (rain hoods or shields, for example).

The WR option is not available on all Renkus-Heinz loudspeakers. Please contact our sales engineering group to confirm availability if you aren't sure about a specific model.

Architects and Engineers Specifications

The loudspeaker shall be designed for permanent installation in outdoor or high humidity environments.

Use for all Iconyx IC-R models with extruded aluminum enclosures – The enclosure shall be fabricated of painted extruded aluminum.

The transducers shall be protected from the elements by a three-layer grille and treated to prevent the formation of rust. The outer grille shall be fabricated from 16 ga perforated (Choose one – nickel plated steel or stainless steel), suitably finished. The intermediate protective screen shall be fiberglass and the inner grille perforated nickel plated steel.

Use for all other models – The enclosure shall be fabricated from multi-ply hardwood and shall be encased in a protective coating of gel coated fiberglass.

The transducers shall be protected from the elements by a three-layer grille and treated to prevent the formation of rust.

The outer grille shall be fabricated from 16 ga perforated (Choose one – nickel plated steel or stainless steel) suitably finished. The intermediate grille shall be at least 1/4" (6 mm) thick reticulated foam capable of withstanding 120 hours of UV (ultra-violet) testing. The inner protective screen shall be fiberglass.

Use for all models – All hardware shall be stainless steel; other metal parts shall be either nickel plated or otherwise treated to withstand a 100 hour salt spray with chlorine test.

All loudspeaker cones shall be treated to reduce moisture absorption. All amplifier PC boards shall be coated to retard moisture penetration and for protection against corrosive atmospheres.

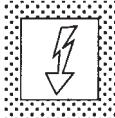
"Pigtails" shall be provided for all external power and signal connections to prevent the entrance of moisture into the cabinet. All access plates shall be sealed to the enclosure with silicon caulking.

Ingress Protection (IP) Ratings

Protection Against Solid Objects

IP Rating Range:

0 to 6 - No protection to totally protected against dust



Renkus-Heinz IP Rating

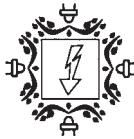
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Protected against quantities of dust that could interfere with satisfactory operation (limited ingress permitted)

Protection Against Liquids

IP Rating Range:

0 to 8 - No protection to protected against long term immersion under pressure



Renkus-Heinz IP Rating

5

Protected against low-pressure water jets from any direction