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Cleveland Browns Stadium

Radiant technology keeps root temperatures optimal for healthy turf and increased player safety. na.rehau.com/projects



REHAU radiant heating system at heart of innovative turf conditioning system

Rising 12 stories above Lake Erie, Cleveland Browns Stadium experiences chilly lake-effect temperatures. REHAU's innovative turf conditioning system prevents the field from freezing and enables healthy green turf to grow long after the normal growing season, allowing the facility to host year around outdoor football.

The system consists of nearly 40 miles of RAUPEX O₂ Barrier crosslinked polyethylene (PEXa) pipe that distributes heated fluid from a series of boilers through an underground piping network and a sophisticated controls system.

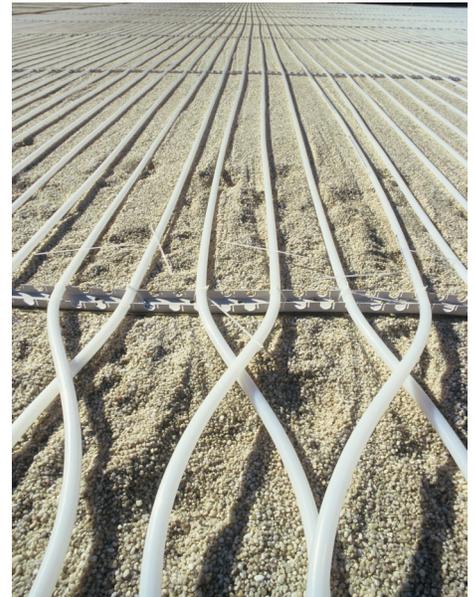
This complex conditioning system, designed to promote grass growth at the roots, is divided into four zones with 189 loops per zone. Each supply and return circuit is identical in length to ensure even temperature distribution throughout the field.

According to REHAU product manager Mike Dietrich, "The goal of the turf conditioning system is to keep the field maintained at 60 to 65°F (15 to 18°C) at the 'root zone,' which is located 10 in. beneath the surface."

In addition to RAUPEX piping, several of REHAU's other radiant heating products, including compression-sleeve fittings and RAILFIX fixing rail, proved to be strong selling points for the Cleveland Browns project.

The compression-sleeve fittings and RAILFIX fixing rail were crucial to completing the project prior to the start of the NFL season. Compression-sleeve fittings enable 3/4 in. crosslinked polyethylene pipe to easily and permanently attach to distribution headers. The RAILFIX rail has built-in grooves with clearly marked measurements, making it easy to execute pipe installation for virtually any spacing specification. Both of these products also offer an advantage in their ease of installation and ability to withstand the harshest weather conditions.

Concluded Dietrich, **"We are pleased the Browns have recognized the value of a turf conditioning system, and we're optimistic that others in the NFL will take advantage of this revolutionary radiant heating product."**



Project: Cleveland Browns Stadium, Cleveland, OH

Construction type: Athletic field, opened in 1999

Project scope: 40 miles of RAUPEX pipe

Architect: HOK Sports Facilities Groups

Engineer: ALGOR, Inc.

Construction manager: Huber, Hunt & Nichols

REHAU systems used: Radiant heating (RAUPEX[®] pipe, compression-sleeve fitting system, RAILFIX[™] fixing rail, PRO-BALANCE[®] manifolds)

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