

3D Puzzle Tile – German Engineered Floors

SPECIALTY



By Huseyin Koca, CIM of Partner Flooring

Join us each issue as we explore different types of floor products that different flooring contractors have installed or partnered with. In this issue we are showcasing 3D Puzzle Tile, a fall protection flooring used in gyms and playgrounds.



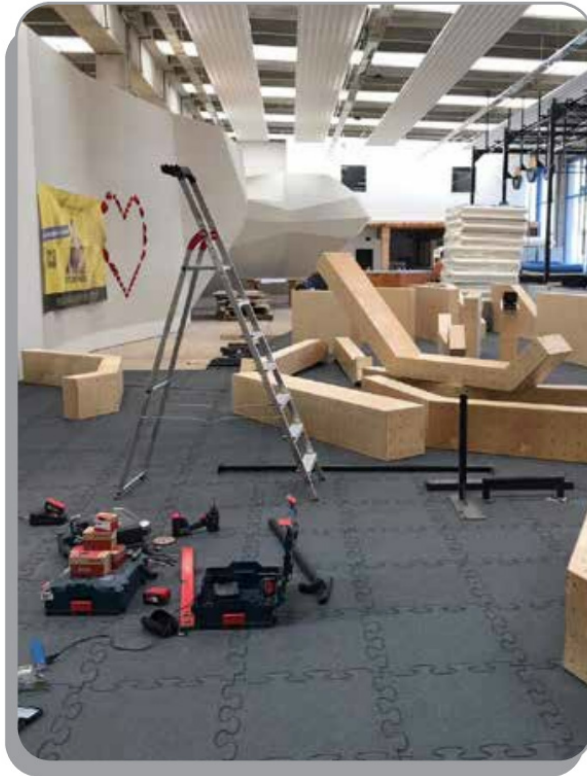
RUBBER flooring is among the most popular material that is quickly gaining interest in a wide range of applications. It has become the first choice in fall protection flooring, especially in gyms and playgrounds, due to the ability to withstand high volume of foot traffic and being able to retain structural integrity during exposure to all weather conditions. Rubber floor tiles are not only resilient, durable, and easy to maintain, but they are also available in many different colors. Due to characteristics of its materials, it has a high coefficient of friction creating an excellent slip resistance surface and is used as fall protection flooring in many applications. However, not all rubber floorings are equally made; there are various versions to reflect quality.

Today we will go over the high-end German engineered rubber 3D Puzzle Tile by Gum-tech (www.gum-tech.de) which provides a patented technology (US Pub. No.: US 2020/0385935) and is available in the United States exclusively by Partner Flooring (www.partnerflooring.com).

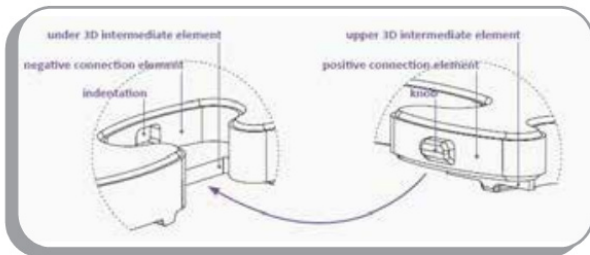
Traditional high-end fall protection tiles are linked together with plug-type connectors to hold the tiles together firmly. This method has disadvantages as it creates potential failure

points. If the tiles are not laid exactly side by side or plug-type connectors are not used (whether it was missing or because it could not be aligned with the holes), this can result in wide gaps and joints which can shift the tile in the long run and become a safety risk. Another potential issue is the unevenness on the area of use. Such unevenness can occur especially with gravel, crushed stone/soil as well as older concrete surfaces. If the area of use is not corrected professionally, fall protection tiles and their plug-type connectors can slide out of place, even to the point where the connectors break. The unaesthetic gaps and overlaps arising in such cases can cause accidents and eliminate the main purpose of these tiles.

German engineers collected feedback from their customers in recent years and developed a tile which is easier to install, prevent installation errors and provide savings on labor and material cost. 3D Puzzle Tile is a new product in fall-protection series and offers a new kind of solution. Engineers have developed 3D intermediate elements so that the tiles are connected both horizontally and vertically which eliminates the need of plug-type connectors or the use of bonding material (glue) to connect and install the tiles. The



3D connection elements hold the tiles firmly together and result in a precisely predefined joint width. The spacings are now automatically identical and the plug-type connectors or bonding material are not required for installation which saves on labor and material cost and prevents application faults.



The patented 3D intermediate elements and typical connection elements of the puzzle tile together form a unit. Additional dovetailing stabilizes this unit. Knobs installed on the positive connection elements form a link with the respective indentations on the negative connection elements. With regards to the previously described problems with conventional tiles, no faults are introduced during installation in this case. The spacings are automatically identical and plug-type connectors are not required. If bulges arise on the surface intended for utilization, the 3D puzzle tile adapts to the substrate and are not pulled apart. The 3D Puzzle Tile also includes edge and corner tiles which allow neat and

accurate closure of the total surface. 3D Puzzle Mat is water-permeable, anti-slip and incorporates proven basic materials to be the number one choice for gyms and playgrounds. The innovative technology of the 3D Puzzle tile has been proven all over Europe. It has been used in European cities such as Berlin, Munich, Paris, Rome, Venice, London, Manchester, Athens, by companies such as Gym 24, Eurobaustoff Handelsgesellschaft mbH & Co. KG, Sport Thieme, Bauhaus and others. It has been the primary selection for playgrounds, gyms, pools, animal ranches, concerts/events, and many other safety floor applications. It is now available in the United States through Partner Flooring and we are looking for test applications. If you are in the market for safety floors than look no further. The 3D Puzzle Tile will be your solution for your next project. Please visit www.partnerflooring.com to see additional pictures and videos of this new and exciting product. ■■■

About the Author: Huseyin Koca, CIM, is the owner of the Partner Flooring which is focused on commercial flooring installation in the North East region. He has been in the flooring industry since July 2015 and was working as a senior level executive at a flooring product manufacturer prior to starting his own company in 2019. Huseyin has a degree in Bachelor of Science in Mechanical Engineering from New Jersey Institute of Technology and a Master of Business Administration in Finance from Loyola University. He is a Certified Installation Manager (CIM).