

Abstract

A heat exchanger element (1) has a heat-conducting body (2) and a heat-transfer fluid pipe (8) which is connected thereto in a heat-conducting manner and which are embedded in sections in ducts (5) of heat-conducting material in heat-conducting contact, the ducts (5) having a channel-shaped locating section (7) and two tabs (6) connected thereto, so that the ducts (5) are approximately Ω -shaped in cross-section, and wherein the tabs (6) are connected flat to the heat-conducting body (2) in order to establish the heat-conducting connection of the heat-conducting fluid pipe (8) to the heat-conducting body (2). To produce the heat exchanger element (1), foil strips are pressed into grooves so that they each form a section (7) pressed into the grooves (23) in a channel-like manner and laterally projecting tabs (6); sections of a heat transfer fluid pipe (8) are inserted into the channel-like sections (7) of the foil strips; and the tabs (6) are connected flat to a heat transfer body (2). A building panel with an area of at least 1 m² comprises a heat exchanger element (1) with a heat exchange surface (14), a cooling device and a collecting device, the cooling device being designed to cool the heat exchange surface (14) in contact with the ambient air to a temperature below the dew point of the water vapour in the ambient air, the contact surface having an inclination to the horizontal so that condensed water can drain from it, and the collecting device being designed to collect and discharge condensed water in a controlled manner. A method of dehumidifying air uses a building panel which lowers the temperature of the ambient air below the dew point so that the air moisture condenses on the building panel, the building panel being so inclined that the condensed water drains into a collecting device.

(Figure 1)