



KG-System (PVC-U)

Installation-Instructions

1. SCOPE AND AREA OF APPLICATION

1.1 Scope

The following instructions apply for the utilisation and installation of KG pipes and fittings made of PVC-U in accordance with DIN EN 1401, or DIN EN 13476-2(pipes). Colour: orange/brown, RAL 8023, which, as a buried ground sewer system, sewer connection and sewer piping system serves to drain off waste water. In the case of piping within buildings, the guidelines on the application of combustible building materials in building construction and the respective assembly instructions for building drainage pipe installations are to be observed.

1.2 Area of application

Sewer pipes and sewer fittings made of PVC-U are used to drain away waste water. In the case of DN/OD 110 to 200, temperatures may not be constantly higher than 45° C, and in the case of DN/OD 250 to 600 they may not be constantly higher than 35° C. PVC sewer pipes and fittings are suitable for the drainage of chemically aggressive water in the region of pH 2 (acid) to pH 12 (basic). They are resistant to household waste water in accordance with DIN 1986-3. For the drainage of industrial waste water, both DIN 8062 and the supplement sheet no. 1 for DIN 8061 are to be observed.

1.2.1 Area of application without a static indication

Utilisation of KG SN 4 pipes and fittings made of PVC-U without static indication is permissible under the following conditions:

- Traffic load does not exceed bridge category 30 in accordance with DIN 1072.
- Minimum cover of 1.00 m under traffic surfaces and a minimum cover of 0.80 m under traffic-free surfaces or such surfaces which are only sometimes subject to light traffic.
- Maximum cover of 6.00 m on bedding in ditches with a width of at least those which are in compliance with DIN 4124 without traffic load; a maximum cover of 4.00 m in far wider ditches and under embankments without traffic load; and a maximum cover of 3.50 in far wider ditches and under embankments under traffic surfaces.
- Bedding material in the area of the pipes: $\gamma < 20.5 \text{ kN/m}^3$, $\gamma \geq 22.5^\circ$ soil constants in accordance with DIN 1055, Part 2, Tables 1 and 2 taking into consideration binding mixed soils as in sections 5 and 6. In unfavourable cases, the following soils in accordance with DIN 18196 may be included as far as this aspect is concerned: Gravel and silt mixture, Gravel and clay mixture, Sand and silt mixture, Sand and clay mixture.
- Requirement in accordance with DIN EN 1610. Bedding in the region of ground water may only be carried out when it has been ensured that no movement of the filling material can occur (e.g. bedding in a gravel filter layer or concrete).

1.2.2 Area of application with a static indication

Should there be any deviations from the abovementioned conditions, a static indication has to be made, and the project questionnaire has to be filled out (see <https://www.ostendorf-kunststoffe.com/services/statikberechnung-objektbogen>). Vertical deformation of the pipes once they have been installed and are under stress may, in accordance with DIN EN 1610, not exceed 6 %.