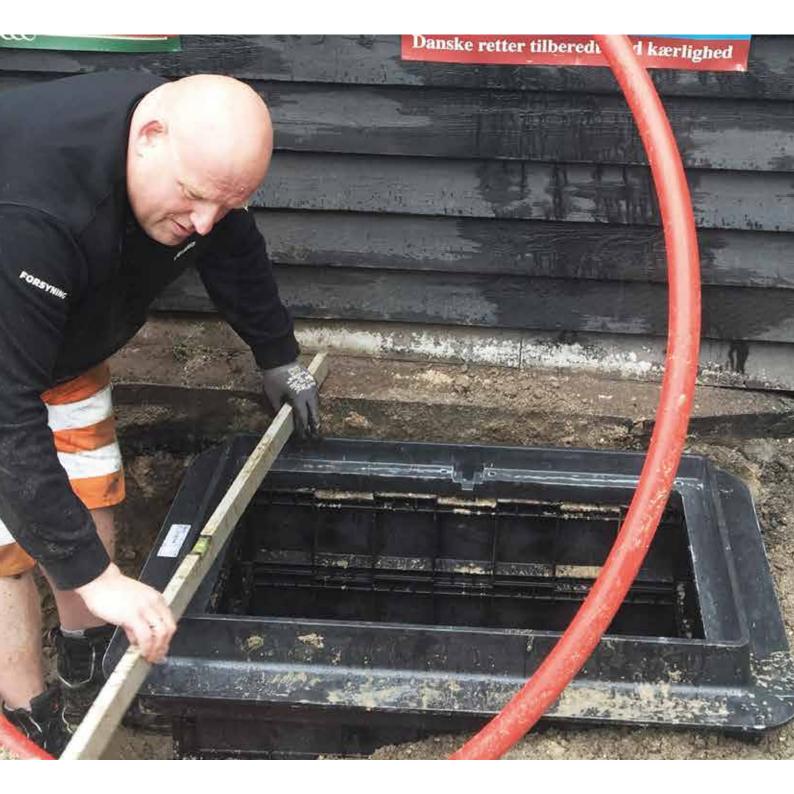


Installation Guide NID Manhole

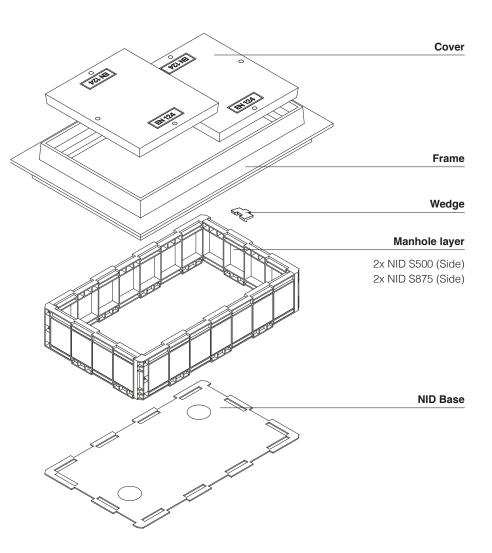


Installation Guide - August 2016





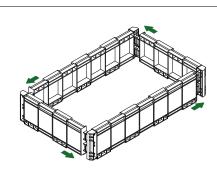
Description of the manhole:



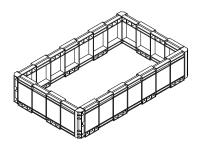




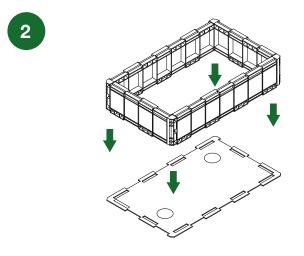
Manhole Assembly Guide:



Click the corners together

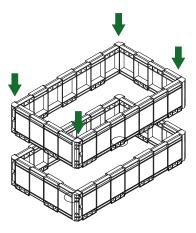


4 clicks to assemble 1 layer

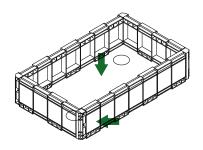


Bottom layer clicks down on base

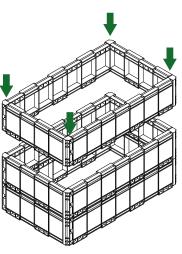




Add the next layer on top



Look for "UP" and "DOWN" indicators

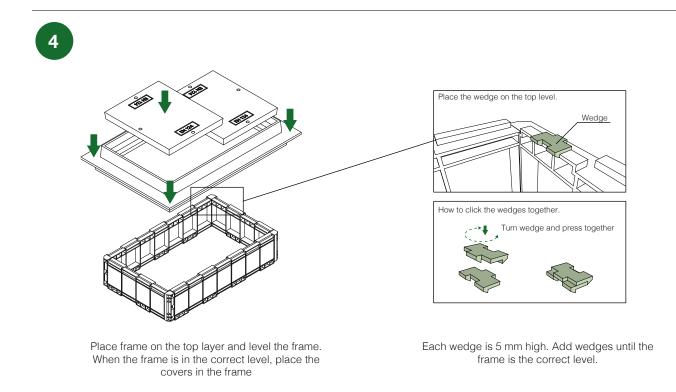


Add layers until correct heigt





Manhole Assembly Guide:





Nordic Infrastructure Design



Examples of installation:





Preparing first layer and base



Installing first layer and base. Make sure it is level.



Adding layers until the height is correct.



Making holes in the manhole



Making holes in the manhole





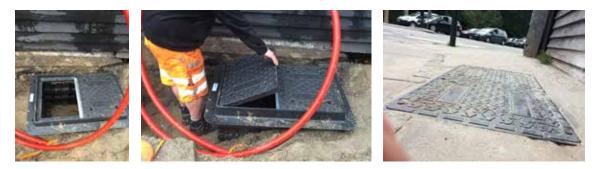
Placing the frame







Leveling the frame before the covers are placed.



Covers are placed





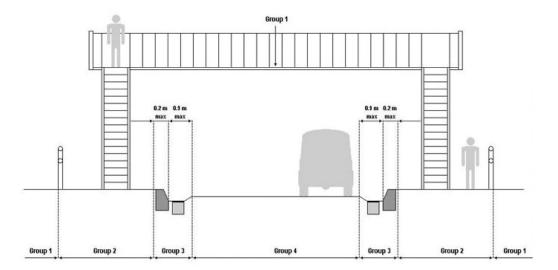


Recommended actions when installing the manhole:

Manhole covers installed in Europe must follow the European Standard EN124. EN124 is used for all manholes placed i roads, sidewalks, paths and recreational areas.

NID Manhole must be installed according to EN124.

EN124 specifies a classification depending on where the manhole is placed.



- If the manhole is placed in open terrain (Group 1), the hole can be approximily the same size as the outer dimensions of the manhole.
- If the manhole is placed in the sidewalk (Group 2), the hole must be at least 50 mm larger then the outer dimension of the manhole.
- If the manhole is placed in the carriageway, (Group 3 and 4), the hole must be at least 150 mm larger then the outer dimension of the manhole.
- The depth of the hole is equal to the the height of the manhole including base, layers, frame and covers and 50 mm for compressed gravel. Moreover there has to be dug 50 mm gravel for leveling in the bottom of the hole when placed in open terrain (Group 1), 100 mm for leveling when placed in the sidewalk (Group 2). In heavy traffic roads (Group 3 and 4) MUST be extremely stable underlay. Meaning; can not be compressed more e. g a underlay of concrete and rebars (15x15cm), with a total thickness of 200 mm.
- If the manhole is placed in open terrain (Group 1), or in the sidewalk (Group 2), compressed gravel must be filled around the manhole.
- If the manhole is placed in the carriageway, (Group 3 and 4), gravel must be filled around the manhole and compressed carefully for every 300 mm. We recommend that the last 300 mm from the top of the manhole is mixed with dry or wet concrete.

