

MEMO 20  
RVK  
PRODUCTION PROCEDURE USING RVK  
DESIGN

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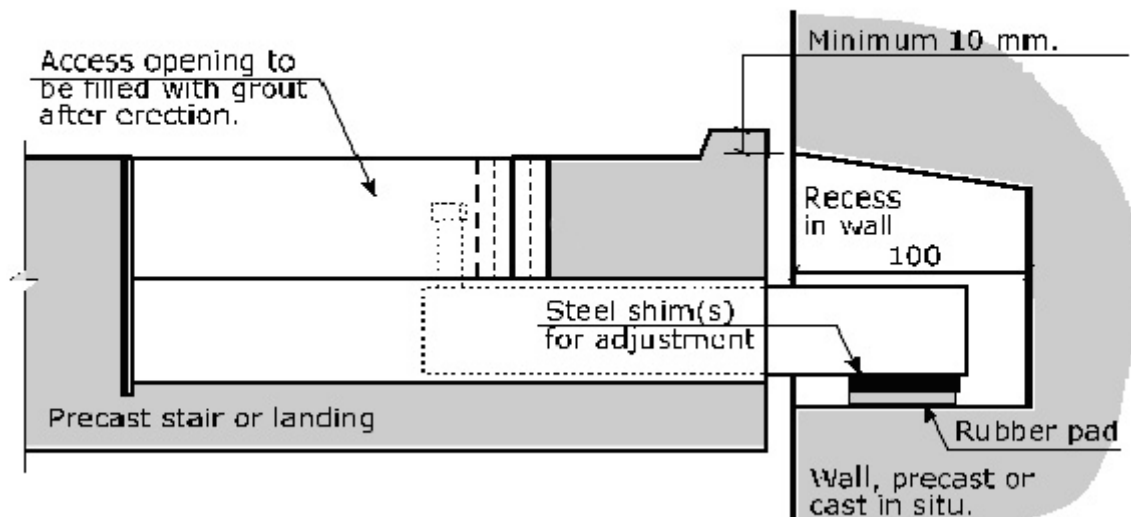
## PRODUCTION PROCEDURE USING RVK

### GENERAL

The RVK unit was originally developed as a connection detail between precast landings and walls in stairways. It provides a hidden connection, the erection is quick, and no site work is necessary with bolts, welding or mortar.

It is important to provide a rubber pad at the support in order to reduce transfer of impact sound between the landing and the wall.

Experience has shown that the RVK connection is suitable for a number of applications in the precasting industry, like a direct connection for stairs, or support for balconies. Since there normally is not a connection that can transfer tensile forces between the RVK unit and the wall, the supported concrete element must be locked in position connection details at least at three sides. Otherwise a steel plate can be embedded in the bottom of the recess in the wall, and a welded connection can be established. This is not recommended for sound insulation purposes, though.



*Figure 20.1. Typical connection between landing and wall.*

## **CASTING PROCEDURE**

Normally the RVK is placed in the precast element with the opening facing upwards, as shown in figure 20.1. This eliminates the need for patching work on the underside after erection.

The type of elements suited for the use of RVK units are normally cast on flat tables, either right side up or upside down, depending upon the requirements to the surfaces. Either way, the method of fixing the unit in the form is similar.

The inner steel tube of the RVK is shorter than the outer tube. A tapered guiding piece (shown in figures 20.2 , 20.3, 20.4 and describe in memo 41 additional equipment ). The guiding piece can be made of timber, steel, rubber or plastic. The outer maximum dimensions of the guiding piece shall be made so that the outer steel tube fits tightly when it is pressed on to the guiding piece.

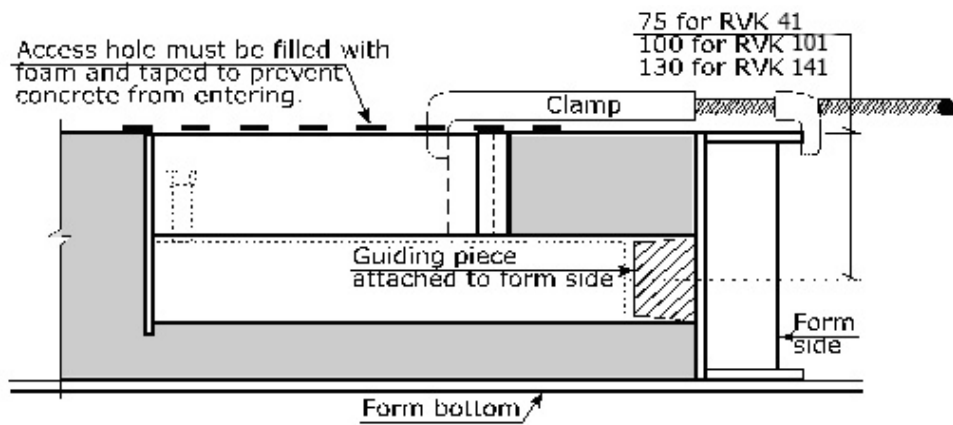


Figure 20.2. Casting right side up, fixing with the guiding piece.

In addition to – or instead of – using a clamp, the RVK unit can be tied to the reinforcement to keep it in its place during casting. Or as figure 20.4 shows, the RVK unit is fastened with a threaded bar through the unit. Whether casting right side up or upside down, the opening for the operation of the RVK during erection (access hole) must be filled with foam rubber and sealed with tape. This to prevent cement slurry from leaking into the void. This should be left in place for as long as possible, as it will reduce the chance of condensation (corrosion) and/or frost damage when the elements are in the stock yard.

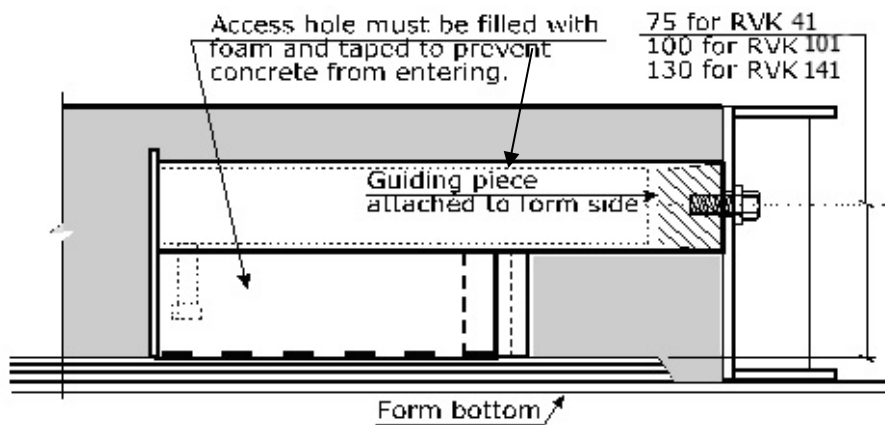


Figure 20.3. Casting upside down.

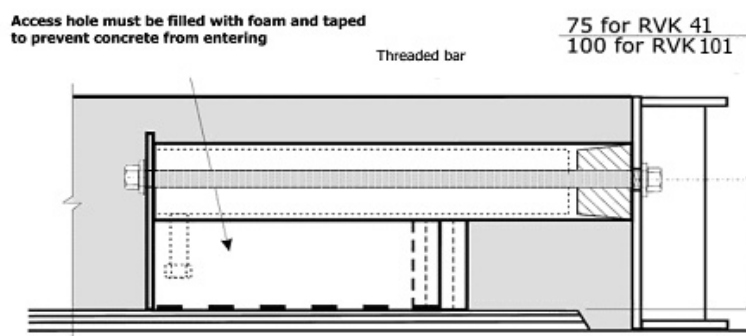


Figure 20.4. Casting upside down, and fasten with a threaded bar

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Date:	Description:
10.08.1995	First edition.
25.05.2016	New template.