Building scheme for RTE

1. Periodic Building Unit – 2. Connection mode – 3. Projections of the unit cell content
4. Channels and/or cages – 5. Supplementary information

1. Periodic Building Unit:

**RTE** can be built using 2-fold (1,4)-connected double 6-rings (D6Rs). The one-dimensional Periodic Building Unit (PerBU) is the chain obtained when D6Rs (one bold in Figure 1), related by pure translations along \( c \), are connected along \( c \) through 4-rings. Alternatively, the chain can be built using 5-1 units as is also illustrated in Figure 1 (see also Alternative description). In the building scheme presented here we will use D6Rs.

2. Connection mode:

Neighboring PerBUs, related by shifts of \( \frac{1}{2}(a + b) \), are connected through 4-rings into the three-dimensional framework of **RTE** depicted in Figure 2.

2. Connection mode of the PerBUs viewed along \( b \) (left) and projections of the unit cell content viewed along \( b \) (top right) and along \( c \) (bottom right). In the perspective drawing only three PerBUs are drawn for clarity.
3. **Projections of the unit cell content:** See Figure 2.

4. **Channels and/or cages:**

The cavity in **RTE** is shown in Figure 3. The **pore descriptor** is added. 8-Ring channels parallel to [001] are formed when cavities are fused along c. The linkage of cavities in the ab plane (through the PerBU) is illustrated in Figure 4.

5. **Supplementary information:**

**Other framework types containing (modified) double 6-rings (D6Rs)**

Several other framework types can be built using (modified) D6Rs. In the **INTRO** pages links are given to descriptions of other framework types containing (modified) D6Rs (choose: **Double 6-rings**). There is also a link provided to a summary of the Periodic Building Units used in the building schemes of these framework types (choose: **Appendix**; **Figure 7**).

**Alternative description of RTE using (modified) 5-rings**

5-Rings can be connected in several other ways. In all cases additional T atoms are needed to build the framework.

In the **INTRO**-pages links are given to a detailed description of a sub-set of framework types that contain (modified) 5-rings (choose: **5-Rings**). There is also a link provided to a summary of the PerBUs used in the building schemes of these framework types (choose: **Appendix**; **Figure 6**).