Building scheme for JRY



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1. Periodic Building Unit

Orthorhombic **JRY** can be built using two edge sharing 4-rings (a 4-2 unit; one bold in Figure 1) as building unit. The T6-units, related along a and b by 2-fold screw axes parallel to a and b, are connected through 6-rings into the two-dimensional PerBU shown in Figure 1.



Fig. 1. PerBU composed of T6-units viewed along c (left) and along b (right). The PerBUs at the right are related by a rotation of 180° about c.

2. Connection mode

PerBUs, related along *c* by a 2-fold screw axis parallel to *c*, are connected through 6- and 10-rings as depicted in Figure 2.



3. Channels and/or cages

Non-interconnecting one-dimensional 10-ring channels are parallel to b. The channel is shown in Figure 3. The **pore descriptor** is added.



Fig. 3. 10-Ring channel viewed along *c* (left) and along *b* (right).



AEL, AET, AFI, AFO, AHT, ATV, BOG, CGF, DFO, JRY, LAU, *STO, TER, USI, VFI

Fig. 4. Composite Building Unit.

5. Supplementary information

Other framework types containing (modified) double 4-rings (D4Rs)

Several other framework types can be built using (modified) D4Rs. In the **INTRO** pages links are given to a detailed description of a sub-set of framework types that contain (modified) D4Rs (choose: **Double 4-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 5**).