1. Periodic Building Unit:

**EON** can be built using the saw chain (bold in Figure 1) running parallel to \(a\). The repeat distance along the saw chain is about 7.5 Å. The repeat unit in the chain consists of 3 T atoms. Six saw chains are connected into infinite building unit 1 consisting of a column of \textit{gme} cavities connected through common 6-rings (Figure 1(a)). Four additional saw chains are connected into infinite building unit 2 shown in Figure 1(b). Building units 1, related by a rotation of 60° about \(a\) and a shift of \(\frac{1}{2}b\), are connected into the Periodic Building Unit 1 (PerBU1) through 5- and 8-rings (Fig. 1(a)). PerBU1 can also be built using 5-1 units and equals the layers perpendicular to <120> in **MAZ**. Building units 2, related by a rotation of 180° about \(c\) (or by a mirror plane perpendicular to \(b\)), are connected into PerBU2 along \(b\) through 4-rings and 8-rings (Fig. 1 (b)). PerBU2 can as well be built using 5-1 units and equals the (010) layer in **MOR**. [See also: Alternative description].

![Figure 1](image)

Figure 1. (a): PerBU1 (**MAZ** layer), composed of columns of (fused) \textit{gme} cavities, viewed along \(c\) (top), and along the saw chain direction parallel to \(a\) (bottom); (b): PerBU2 (**MOR** layer) viewed along \(c\) (top), and along the saw chain direction parallel to \(a\) (bottom).
2. Connection mode:

PerBU1s and PerBU2s alternate along $c$ and are connected through crankshaft chains into the 3-dimensional framework of EON. 12-Ring channels and a second type of 8-ring channels parallel to $a$ are formed. The 8-ring channel interconnects along $c$ the 12-ring channel and the gme columns as shown in Figure 2.

![Figure 2](image)

Figure 2. Connection mode in EON viewed along $a$ (left), and projection of the unit cell content along $a$ (top right), and along $b$ (bottom right).

3. Projections of the unit cell content: See Figure 2.

4. Channels and/or cages:

One-dimensional non-interconnecting 12-ring channels and 8-ring channels are parallel to $a$ as shown in Figure 3 on next page. The pore descriptors are added. Columns of gme cavities are interconnected along $b$ through 8-ring channels of type 1 (Figures 1 and 2) and 12-ring channels and gme columns are interconnected along $c$ through interconnecting cavities and 8-ring channels (Figures 2 and 4) leading to a rather complicated three-dimensional channel system with 8-ring windows. The linkage between channels is illustrated in Figure 4 on next page.
Figure 3. From top to bottom: gmel cavity, 8-ring channel, interconnecting cavity, and 12-ring channel viewed along a (left), and along c (right). [Figure 4 is on next page]
5. Supplementary information:

*Other framework types containing saw chains*
In several framework types at least one of the unit cell dimensions is about n*7.5 Å (where n = 1, 2, 3... etc.). In many cases this indicates the presence of saw chains. In the **INTRO**-pages links are given to descriptions of other framework types containing (twisted) saw chains (choose: **Saw chains**). 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 2**).

*Alternative description using (modified) 5-rings*
Several framework types, like **EON**, can be constructed using (modified) 5-rings. In the **INTRO** pages links are given to detailed descriptions of these framework types (choose: **5-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 6**).