

National Commission for Stratigraphy Belgium

Home Lower Paleozoic Devonian Carboniferous Permian/Triassic/Jurassic Cretaceous Paleogene-Neogene Quaternary
News RegWal Alteration units

5.23 Longpré Formation - LPR

Carboniferous

[Commission members](#)
[Proposals and discussions](#)
[Lithostratigraphy](#)
[Chronostratigraphy](#)

Authors: Hance & Poty, this paper.

Description: The Longpré Fm includes two members, from base to top, the Flémalle and the Avins Mbrs, which were formerly described as formations. The formation overlies the Martinrive Formation (CSA) or the top, sometimes karstified, of the Engihoul Formation (NSA), and is abruptly overlain by the Terwagne Formation. The Longpré Fm can be more or less dolomitized (the Modave Fm of Hance, 1988, is now part of the Longpré Fm).

- **Flémalle Member – FLM** (Malpica, 1973; Paproth et al., 1983; Hance et al., 1994)

Thick-bedded to massive, pale grey, crinoidal limestones (packstones and grainstones), with numerous megachonetids, large gastropods and solitary rugose corals .

- **Avins Mbr – AVN** (Bless et al., 1976; Groessens et al., 1982; Paproth et al., 1983; Hance et al., 1994)

Thick-bedded to massive, pale coloured, oolitic limestones (grainstones). The macrofauna is poorly diversified and is usually restricted to numerous productid brachiopods (*Levitusia humerosa*) and rare rugose corals. The contact with the underlying Flémalle Mbr is progressive in the NSA. In contrast, in the CSA it is sharp and irregular and was identified as a paleokarstic surface by Conil (1967) and Hance (1988). However, a dolomitization front could also produce such a contact.

Stratotype: Longpré quarry in Longpré village, 7 km west of Huy (NSA). The stratotypes of the members are as follows. Flémalle Mbr: railway cutting below Chokier castle, Chokier (Flémalle-Haute, NSA). Avins Mbr: road section on the right bank of the R. Hoyoux, below the church at Les Avins-en-Condroz (CSA).

Area: Eastern part of the NSA and CSA. The Flémalle Mbr, dolomitized, is present in the upper part of the Huré Dolomite in the Boulonnais (Poty, 1994). The Avins Mbr can be correlated with the main part of the Godin Fm in the ASA, the few meters of crinoidal limestone at the base being the equivalent of the Flémalle Mbr (Mansy et al., 1989).

Thickness: The thickness is unknown in the stratotype where the base of the formation is not exposed. At Chokier (NSA) it is 30 m thick (Flémalle Mbr, 26 m; Avins Mbr, 4 m), and it reaches about 78 m in the Ourthe valley (CSA; Flémalle Mbr, 70 m; Avins Mbr, 8 m). In its stratotype the Avins Mbr is 15 m thick, but it is thicker in the western part of the CSA (up to 40 m) and thinner in the eastern part of the CSA and in the NSA (4 – 8m). In the ASA it reaches 68 m (Godin Fm).

Age: Early Moliniacian (latest Tournaisian). RC4aCoral Subzone (*Sychnoelasma hawbankense* and *Cyathoclisia modavensis* main taxa) for the Flémalle Mbr; RC4bCoral Subzone for the Avins Mbr. Cf4a1 Foraminifer Subzone, mainly characterized by the occurrence of *Brunsia*, *Bessiella*, *Florennella* and *Latiendothyranopsis*, in Flémalle Mbr, and of *Biseriella bristolensis* and *Loeblichia fragilis* in Avins Mbr. The presence of *Protognathodus cordiformis* in the lower part of the formation in the Ourthe valley is indicative of the *Scaliognathus anchoralis* Conodont Zone. The Longpré Fm corresponds to the HST of the third-order sequence 4 of Hance et al. (2001).