

**Chronostratigraphic age:** Emsian–lower Givetian (SCHÖNLAUB et al., 2004: p. 16).

**Biostratigraphy:** -

**Thickness:** 330 m.

**Lithostratigraphically higher rank unit:** -

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** Seewarte Limestone (conformable contact).

**Overlying unit(s):** Kellergrat Reef Limestone (conformable contact).

**Lateral unit(s):** Lambertenghi Limestone, Spinotti Limestone, Vinz Limestone, Cellon Limestone.

**Geographic distribution:** Carnic Alps.

**Remarks:** -

**Complementary references:** SCHÖNLAUB (1985c), SCHÖNLAUB & HISTON (2000).

### Freikofel-Kalk / Freikofel Limestone

THOMAS J. SUTTNER, ERIKA KIDO

**Validity:** Invalid; mentioned by BANDEL (1972) and SCHÖNLAUB (1985a: p. 43); included within the summary of the Variscan carbonate sequences in the Carnic Alps (KREUTZER, 1992b: p. 30); lithology and facies described by SCHÖNLAUB et al. (2004).

**Type area:** ÖK50-UTM, map sheets 3109 Oberdrauburg, 3110 Kötschach-Mauthen, 3116 Sonnenalpe Naßfeld (ÖK50-BMN, map sheet 197 Kötschach).

**Type section:** -

**Reference section(s):** Mount Freikofel [= Cuelat] (SCHÖNLAUB et al., 2004), N 46°36'03" / E 12°58'39"; Pal Grande, Pal Piccolo, Creta di Timau (PERRI & SPALLETTA, 1998a).

**Derivation of name:** After Mount Freikofel (SCHÖNLAUB, 1985a: p. 43).

**Synonyms:** 'Lithoklastkalk' (BANDEL, 1974: p. 101).

**Lithology:** Light red to greyish pelagic limestone (KREUTZER, 1992b).

**Fossils:** Cephalopods, conodonts, corals, crinoids, trilobites.

**Origin, facies:** Marine limestone, gravity flow deposits belonging to the Pelagic Carbonate Facies (KREUTZER, 1992a: p. 272; SCHÖNLAUB et al., 2004: p. 45).

**Chronostratigraphic age:** Eifelian–Givetian.

**Biostratigraphy:** *costatus* conodont zone (PERRI & SPALLETTA, 1998a).

**Thickness:** > 100 m.

**Lithostratigraphically higher rank unit:** -

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** Vinz Limestone (conformable contact).

**Overlying unit(s):** Pal Limestone (conformable contact).

**Lateral unit(s):** Cellon Limestone, Findenig Limestone, Hohe Trieb Formation.

**Geographic distribution:** Carnic Alps.

**Remarks:** -

**Complementary references:** SCHÖNLAUB & HISTON (2000), BRIME et al. (2008).

### Cellon-Kalk / Cellon Limestone

THOMAS J. SUTTNER, ERIKA KIDO

**Validity:** Invalid; first detailed profiles by BANDEL (1972, 1974); mapped by KREUTZER & SCHÖNLAUB (1984); lithology and facies described by SCHÖNLAUB (1985a) and KREUTZER (1992a); included within the summary of the Variscan carbonate sequences in the Carnic Alps (KREUTZER, 1992b: p. 30).

**Type area:** ÖK50-UTM, map sheets 3109 Oberdrauburg, 3110 Kötschach-Mauthen, 3111 Spittal an der Drau, 3112 Villach, 3116 Sonnenalpe Naßfeld, 3117 Nötsch im Gailtal, 3118 Arnoldstein (ÖK50-BMN, map sheets 197 Kötschach, 198 Weißbriach, 199 Hermagor, 200 Arnoldstein).

**Type section:** Upper part of Cellon avalanche gully (KREUTZER, 1992a), N 46°36'31" / E 12°56'08".

**Reference section(s):** Lower Kellerwand cliff (Obere Valentinalm to Eiskarkopf), Kleiner Pal (KREUTZER & SCHÖNLAUB, 1984; KREUTZER, 1990).

**Derivation of name:** After Mount Cellon.

**Synonyms:** 'Lithoklastkalk' (BANDEL, 1974: p. 101); Kunzkopf-Kalk (KREUTZER, 1990).

**Lithology:** Massive grey limestone with pelagic biogenes with debris layers (KREUTZER, 1992b).

**Fossils:** Bivalves, cephalopods, corals, conodonts, echinoderms, foraminifers, gastropods, stromatoporoids, trilobites.

**Origin, facies:** Marine limestone, pelagic unit (Transitional Facies).

**Chronostratigraphic age:** Eifelian–Givetian.

**Biostratigraphy:** *partitus*, *costatus* and *varcus* conodont zones (KREUTZER, 1990).

**Thickness:** 210 m.

**Lithostratigraphically higher rank unit:** -

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** Vinz Limestone (conformable contact).

**Overlying unit(s):** Pal Limestone (conformable contact).

**Lateral unit(s):** Eiskar Limestone, Kellergrat Reef Limestone, Freikofel Limestone.

**Geographic distribution:** Carnic Alps.

**Remarks:** -

**Complementary references:** KREUTZER et al. (1997, 2000), VAI (1998), SCHÖNLAUB & HISTON (2000), SCHÖNLAUB et al. (2004).

### Hohe Trieb-Formation / Hohe Trieb Formation

THOMAS J. SUTTNER, ERIKA KIDO

**Validity:** Valid; well described by PÖLSLER (1969a) and SCHÖNLAUB (1969a); mapped by SCHÖNLAUB (1981); named by SCHÖNLAUB (1985a: p. 43); unit formalized by KREUTZER (1992b).

**Type area:** ÖK50-UTM, map sheets 3109 Oberdrauburg, 3110 Kötschach-Mauthen, 3111 Spittal an der Drau, 3116 Sonnenalpe Naßfeld, 3117 Nötsch im Gailtal (ÖK50-BMN, map sheets 197 Kötschach, 198 Weißbriach, 199 Hermagor).

**Type section:** Hoher Trieb (SCHÖNLAUB, 1969a), N 46°35'46" / E 13°03'31".

# Austrian Stratigraphic Chart 2004 - Paleozoic

(sedimentary successions)

Austrian Stratigraphic Commission



ERA	SYSTEM / PERIOD / SERIES / EPOCH	STAGE / AGE	DURATION Ma	Global Classification					
				ERATHM / ERA	SYSTEM / PERIOD / SERIES / EPOCH				
PALEOZOIC	PERMIAN	CHANGHSINGIAN / Dorashamian	251	PERMIAN	MID PERMIAN / GUADALUPIAN				
		WUCHIAPINGIAN / Dzhulfian	255						
		CAPITANIAN	260						
		WORDIAN	265						
		ROADIAN	270						
		PERMIAN	LOWER PERMIAN / CISURALIAN			KUNGURIAN	275		
						ARTINSKIAN	280		
						SAKMARIAN	285		
						ASSELIAN	290		
		PERMIAN	TRIAS			GZHELIAN	295	TRIAS	U. CARBONIFEROUS / PENNSYLVANIAN
KASIMOVIAN	300								
MOSKOVIAN	305								
BASHKIRIAN	310								
TRIAS	LOWER CARBONIFEROUS / MISSISSIPPIAN			SERPUKHOVIAN	315				
				VISEAN	320				
				TOURNAISIAN	325				
PERMIAN	DEVONIAN			FAMENNIAN	350	DEVONIAN	UPPER DEVONIAN		
				FRASNIAN	355				
				GIVETIAN	360				
		EIFELIAN	365						
		DEVONIAN	LOWER DEVONIAN	EMSIAN	370				
				LOCHKOVIAN	375				
		PERMIAN	DEVONIAN	LUDFORDIAN / GORSTIAN	380			DEVONIAN	MIDDLE DEVONIAN
				HOMERIAN / SHEINWOOD	385				
				TELYCHIAN	390				
				AERONIAN	395				
RHUDDANIAN	400								
DEVONIAN	LOWER DEVONIAN			PRAGIAN	405				
				LOCHKOVIAN	410				
PERMIAN	DEVONIAN			WEN-LOCK / LOW	415	DEVONIAN	LOWER DEVONIAN		
				HIRNANTIAN	420				
				LLANDOVERY	425				
		AERONIAN	430						
		RHUDDANIAN	435						
		DEVONIAN	LOWER DEVONIAN	PRAGIAN	440				
				LOCHKOVIAN	445				
		PERMIAN	DEVONIAN	WEN-LOCK / LOW	450			DEVONIAN	UPPER ORDOVICIAN
				LLANDOVERY	455				
				AERONIAN	460				
RHUDDANIAN	465								
DEVONIAN	LOWER DEVONIAN			PRAGIAN	470				
				LOCHKOVIAN	475				
PERMIAN	DEVONIAN			WEN-LOCK / LOW	480	DEVONIAN	MIDDLE ORDOVICIAN		
				LLANDOVERY	485				
				AERONIAN	490				
				RHUDDANIAN	495				
		DEVONIAN	LOWER DEVONIAN	PRAGIAN	500				
				LOCHKOVIAN	505				
		PERMIAN	DEVONIAN	WEN-LOCK / LOW	510			DEVONIAN	LOWER ORDOVICIAN
				LLANDOVERY	515				
				AERONIAN	520				
				RHUDDANIAN	525				
DEVONIAN	LOWER DEVONIAN			PRAGIAN	530				
				LOCHKOVIAN	535				
PERMIAN	DEVONIAN			WEN-LOCK / LOW	540	DEVONIAN	UPPER CAMBRIAN		
				LLANDOVERY	545				
				AERONIAN	550				
				RHUDDANIAN	555				
		DEVONIAN	LOWER DEVONIAN	PRAGIAN	560				
				LOCHKOVIAN	565				
		PERMIAN	DEVONIAN	WEN-LOCK / LOW	570			DEVONIAN	MIDDLE CAMBRIAN
				LLANDOVERY	575				
				AERONIAN	580				
				RHUDDANIAN	585				
DEVONIAN	LOWER DEVONIAN			PRAGIAN	590				
				LOCHKOVIAN	595				
PERMIAN	DEVONIAN			WEN-LOCK / LOW	600	DEVONIAN	LOWER CAMBRIAN		
				LLANDOVERY	605				
				AERONIAN	610				
				RHUDDANIAN	615				
		DEVONIAN	LOWER DEVONIAN	PRAGIAN	620				
				LOCHKOVIAN	625				



### Legend

- pelagic, offshore, siliciclastic
- pelagic, nearshore, calcareous
- shallow marin, neritic
- terrestrial-continental, coarse clastic
- terrestrial-continental, fine clastic
- evaporite (chloride, sulphate)
- rhyolite, dacite
- (basaltic) andesite, trachyandesite
- basalt
- phyllite
- mixed-facies (in corresponding colors)
- coal (may include several seams)
- ? position/age doubtful/controversial
- | equal units
- \ older unit left \ younger unit right
- hiatus
- unconformity
- GSSP
- Fm. Formation
- Ls. Limestone

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Cutout and English adaptation of the "Die Stratigraphische Tabelle von Österreich 2004": Geological Survey of Austria

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