

BUILDING  
COMMON GROUND



# Egcobox<sup>®</sup> FB

Thermal conductivities



## Thermal conductivity Egcobox® type FBM

for cantilever slabs for transmission of moment and shear force, **Insulation 80 mm mineral wool**

	Egcobox type	FBM 14-8-CB	FBM 14-10-CB	FBM 14±-8-S	FBM 14±-10-S	FBM 20±-8-S	FBM 20±-10-S	FBM 20±-12-S
	length of element l [mm]	220	220	220	220	220	220	220
		$\lambda_{eq,3D}$ [W/(m²K)]						
height of connection [mm]	180	0,364	0,395	0,364	0,395	0,599	0,625	0,653
	190	0,344	0,373	0,344	0,373	0,563	0,588	0,614
	200	0,326	0,353	0,326	0,353	0,531	0,555	0,579
	210	0,309	0,335	0,309	0,335	0,503	0,525	0,548
	220	0,295	0,319	0,295	0,319	0,478	0,498	0,520
	230	0,281	0,305	0,281	0,305	0,455	0,474	0,494
	240	0,269	0,291	0,269	0,291	0,434	0,452	0,471
	250	0,258	0,279	0,258	0,279	0,415	0,432	0,451
	260	0,247	0,267	0,247	0,267	0,397	0,414	0,431
	270	0,238	0,257	0,238	0,257	0,381	0,397	0,414
	280	0,229	0,247	0,229	0,247	0,366	0,381	0,397

$R_{eq,3D}$  = joint thickness /  $\lambda_{eq,3D}$

## Thermal conductivity Egcobox® type FBVM

for supported plates for transmission of shear forces, **Insulation 80 mm mineral wool**

	Egcobox type	FBVM 8	FBVM 10	FBVM 12
	length of element l [mm]	220	220	220
		$\lambda_{eq,3D}$ [W/(m²K)]		
height of connection [mm]	180	0,233	0,238	0,278
	190	0,220	0,224	0,262
	200	0,209	0,213	0,248
	210	0,198	0,202	0,235
	220	0,189	0,192	0,224
	230	0,180	0,183	0,214
	240	0,172	0,175	0,204
	250	0,165	0,168	0,196
	260	0,158	0,161	0,188
	270	0,152	0,155	0,180
	280	0,147	0,149	0,174

$R_{eq,3D}$  = joint thickness /  $\lambda_{eq,3D}$

When considering punctually connected slabs, the  $\lambda_{eq}$  of the Egcobox and the intermediate insulation can be averaged over the entire connection length.

The equivalent thermal conductivities calculated according to the EAD (European Assessment Document) calculation method: EAD 050001-00-0301; incl. 15 mm end plate

## Thermal conductivity Egcobox® type FBXL

for cantilever slabs for transmission of moment and shear force, **insulation 120 mm mineral wool**

	Egcobox type	FBXL 14-8-CB	FBXL 14-10-CB	FBXL 14±-8-S	FBXL 14±-10-S	FBXL 20±-8-S	FBXL 20±-10-S	FBXL 20±-12-S
	length of element l [mm]	220	220	220	220	220	220	220
		$\lambda_{eq,3D}$ [W/(m²K)]						
height of connection [mm]	180	0,359	0,381	0,359	0,381	0,594	0,614	0,629
	190	0,340	0,361	0,340	0,361	0,561	0,579	0,593
	200	0,323	0,344	0,323	0,344	0,531	0,548	0,562
	210	0,308	0,327	0,308	0,327	0,505	0,521	0,534
	220	0,294	0,312	0,294	0,312	0,481	0,496	0,509
	230	0,282	0,298	0,282	0,298	0,459	0,473	0,485
	240	0,270	0,286	0,270	0,286	0,439	0,453	0,464
	250	0,259	0,274	0,259	0,274	0,420	0,434	0,445
	260	0,249	0,264	0,249	0,264	0,403	0,416	0,427
	270	0,240	0,254	0,240	0,254	0,388	0,400	0,410
	280	0,232	0,245	0,232	0,245	0,373	0,385	0,395

$R_{eq,3D}$  = joint thickness /  $\lambda_{eq,3D}$

## Thermal conductivity Egcobox® type FBVXL

for supported plates for transmission of shear forces, **insulation 120 mm mineral wool**

	Egcobox type	FBVXL 8	FBVXL 10	FBVXL 12
	length of element l [mm]	220	220	220
		$\lambda_{eq,3D}$ [W/(m²K)]		
height of connection [mm]	180	0,225	0,246	0,269
	190	0,213	0,233	0,254
	200	0,202	0,221	0,241
	210	0,193	0,211	0,230
	220	0,184	0,201	0,219
	230	0,176	0,192	0,209
	240	0,168	0,184	0,200
	250	0,161	0,176	0,192
	260	0,155	0,169	0,185
	270	0,149	0,163	0,177
	280	0,144	0,157	0,171

$R_{eq,3D}$  = joint thickness /  $\lambda_{eq,3D}$

When considering punctually connected slabs, the  $\lambda_{eq}$  of the Egcobox and the intermediate insulation can be averaged over the entire connection length.

The equivalent thermal conductivities calculated according to the EAD (European Assessment Document) calculation method: EAD 050001-00-0301; incl. 15 mm end plate

## Thermal conductivity Egcobox® type FBM

for cantilever slabs for transmission of moment and shear force, **Insulation 80 mm polystyrene**

	Egcobox type	FBM 14-8-CB	FBM 14-10-CB	FBM 14±-8-S	FBM 14±-10-S	FBM 20±-8-S	FBM 20±-10-S	FBM 20±-12-S
	length of element l [mm]	220	220	220	220	220	220	220
		$\lambda_{eq,3D}$ [W/(m²K)]						
height of connection [mm]	180	0,354	0,386	0,354	0,366	0,588	0,615	0,603
	190	0,335	0,364	0,335	0,364	0,553	0,578	0,568
	200	0,317	0,345	0,317	0,345	0,522	0,545	0,536
	210	0,301	0,328	0,301	0,328	0,494	0,516	0,507
	220	0,287	0,312	0,287	0,312	0,469	0,490	0,481
	230	0,274	0,297	0,274	0,297	0,446	0,466	0,458
	240	0,262	0,284	0,262	0,284	0,426	0,444	0,437
	250	0,251	0,272	0,251	0,272	0,407	0,425	0,417
	260	0,240	0,261	0,240	0,261	0,390	0,407	0,399
	270	0,231	0,251	0,231	0,251	0,374	0,390	0,384
	280	0,222	0,241	0,222	0,241	0,359	0,375	0,368

$R_{eq,3D}$  = joint thickness /  $\lambda_{eq,3D}$

## Thermal conductivity Egcobox® type FBVM

for supported plates for transmission of shear forces, **Insulation 80 mm polystyrene**

	Egcobox type	FBVM 8	FBVM 10	FBVM 12
	length of element l [mm]	220	220	220
		$\lambda_{eq,3D}$ [W/(m²K)]		
height of connection [mm]	180	0,225	0,228	0,270
	190	0,212	0,215	0,255
	200	0,201	0,204	0,241
	210	0,191	0,193	0,229
	220	0,182	0,184	0,218
	230	0,173	0,176	0,208
	240	0,166	0,168	0,198
	250	0,159	0,161	0,190
	260	0,152	0,154	0,182
	270	0,147	0,148	0,175
	280	0,141	0,143	0,169

$R_{eq,3D}$  = joint thickness /  $\lambda_{eq,3D}$

When considering punctually connected slabs, the  $\lambda_{eq}$  of the Egcobox and the intermediate insulation can be averaged over the entire connection length.

The equivalent thermal conductivities calculated according to the EAD (European Assessment Document) calculation method: EAD 050001-00-0301; incl. 15 mm end plate

## Thermal conductivity Egcobox® type FBXL

for cantilever slabs for transmission of moment and shear force, **insulation 120 mm polystyrene**

	Egcobox type	FBXL 14-8-CB	FBXL 14-10-CB	FBXL 14±-8-S	FBXL 14±-10-S	FBXL 20±-8-S	FBXL 20±-10-S	FBXL 20±-12-S
	length of element l [mm]	220	220	220	220	220	220	220
		$\lambda_{eq,3D}$ [W/(m²K)]						
height of connection [mm]	180	0,351	0,373	0,351	0,373	0,585	0,604	0,621
	190	0,332	0,354	0,332	0,354	0,552	0,570	0,585
	200	0,316	0,336	0,316	0,336	0,523	0,540	0,554
	210	0,301	0,320	0,301	0,320	0,496	0,513	0,526
	220	0,287	0,305	0,287	0,305	0,473	0,488	0,501
	230	0,275	0,292	0,275	0,292	0,451	0,466	0,478
	240	0,263	0,280	0,263	0,280	0,431	0,445	0,457
	250	0,253	0,268	0,253	0,268	0,413	0,427	0,438
	260	0,243	0,258	0,243	0,258	0,396	0,409	0,420
	270	0,234	0,248	0,234	0,248	0,381	0,393	0,404
	280	0,226	0,239	0,226	0,239	0,367	0,379	0,389

$R_{eq,3D}$  = joint thickness /  $\lambda_{eq,3D}$

## Thermal conductivity Egcobox® type FBVXL

for supported plates for transmission of shear forces, **insulation 120 mm polystyrene**

	Egcobox type	FBVXL 8	FBVXL 10	FBVXL 12
	length of element l [mm]	220	220	220
		$\lambda_{eq,3D}$ [W/(m²K)]		
height of connection [mm]	180	0,217	0,239	0,263
	190	0,206	0,226	0,249
	200	0,195	0,215	0,236
	210	0,186	0,204	0,224
	220	0,177	0,195	0,214
	230	0,169	0,186	0,204
	240	0,162	0,178	0,196
	250	0,156	0,171	0,188
	260	0,150	0,164	0,180
	270	0,144	0,158	0,173
	280	0,139	0,152	0,167

$R_{eq,3D}$  = joint thickness /  $\lambda_{eq,3D}$

When considering punctually connected slabs, the  $\lambda_{eq}$  of the Egcobox and the intermediate insulation can be averaged over the entire connection length.

The equivalent thermal conductivities calculated according to the EAD (European Assessment Document) calculation method: EAD 050001-00-0301; incl. 15 mm end plate