neue Holzbau AG
Obseestrasse 11
CH-6078 Lungern
Tel. +41 41 679 70 80
Fax +41 41 679 70 59

Timber deck for heavy loadings
GSA®- TCD-System

n'H-Timber beams with GSA®-shear connectors
Chart only to be used for pre-calculations
jus/V1.02/27.02.2018-E

Live Load q_{LL}	2.0kN/m²		3.0kN/m²		5.0kN/m²	
span [m]	dimension [mm]		dimension [mm]		dimension [mm]	
7.0	200/240		200/240		200/280	
8.0	200/280		200/280		200/320	
9.0	200/320		200/320		240/360	200/400
10.0	240/360	200/400	240/360	200/400	240/400	200/440
11.0	240/400	200/440	240/400	200/440	240/440	200/480
12.0	240/440	200/480	240/440	200/480	240/480	200/520
more than 13.0	on demand		on demand		on demand	

base:

Criterias	ULS and SLS according to Eurocode
Self weight of deck	g_k = 3.5 kN/m²
Dead Load	q_{DL} = 2.0 kN/m²
Spacing of beams	1.0 m
Depth of concrete	h = 120 mm
Service class	1
System	single span (with applied precamber)
Fire resistance	REI 60
Noise protection(1)	$L'_{n,w}$ = 47 – 32 dB (Impact)
Noise protection(1)	R'_w = 62 – 64 dB (Airborne)

Additional basic conditions such as support of beams, general details, quality of concrete, concrete reinforcements etc. : To be determined by engineering office or n'H.
Vibrations according to P. Hamm – Konstruktionsregeln für die Praxis, 2. Inernationales Forum Holzbau Beaune 2012
(1) Floor composition: Cement screed and insulation (mineral fibre)