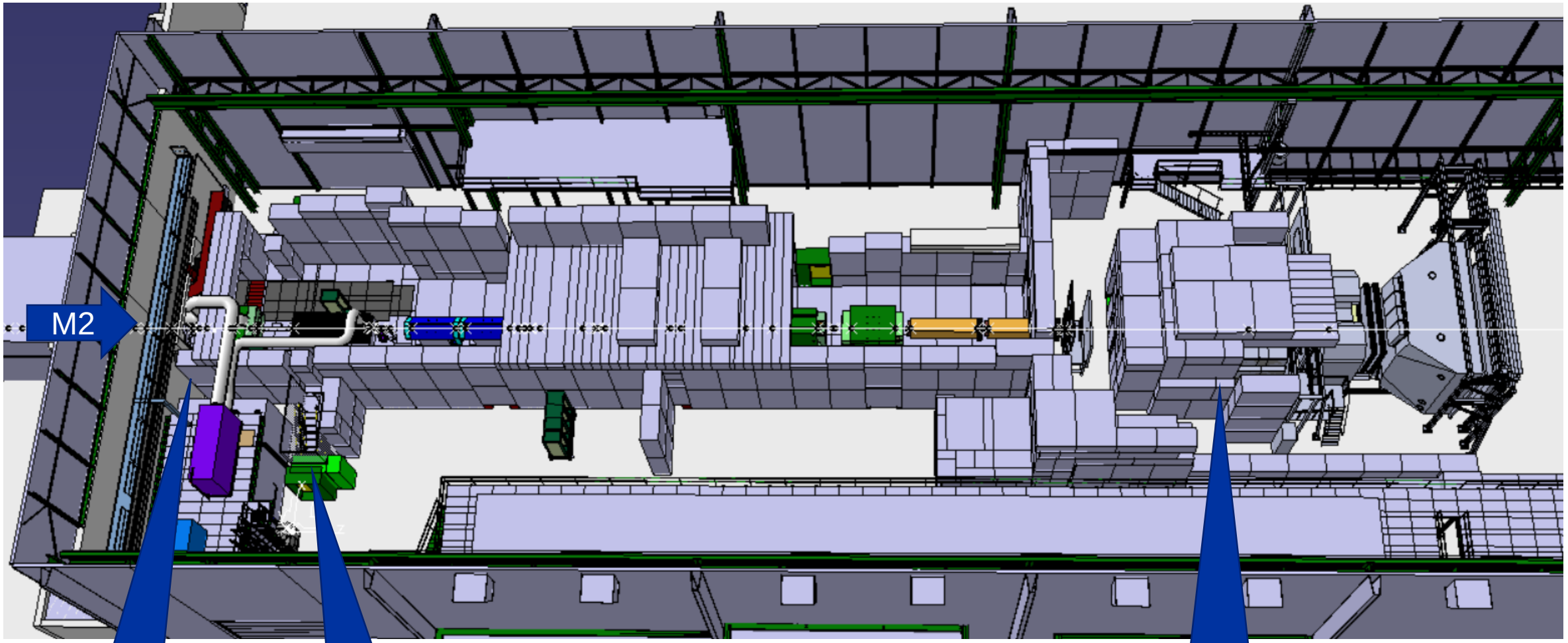
Improvement of shielding for high intensity hadron operation of M2

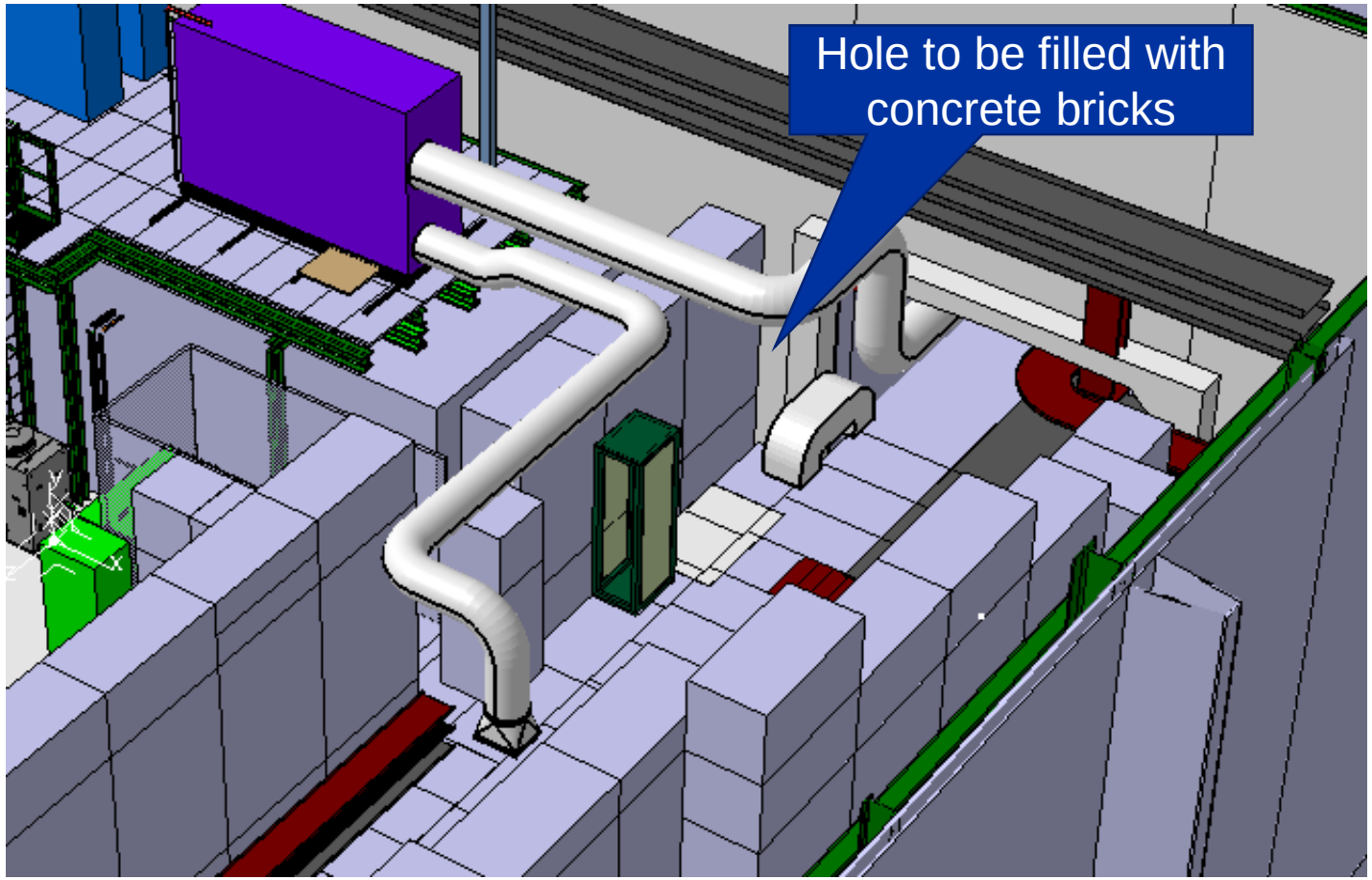
https://edms.cern.ch/document/2688172/

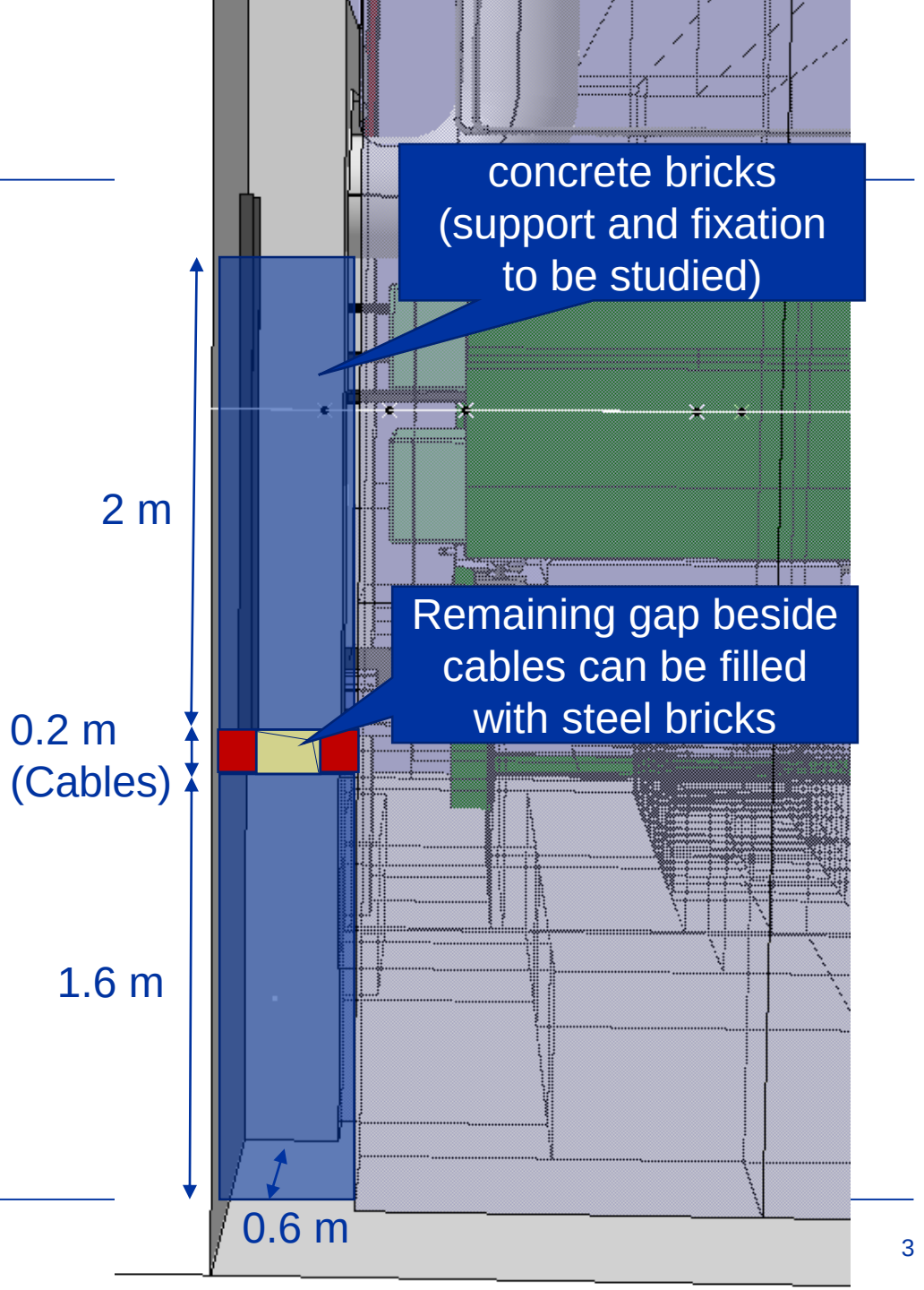
S. Girod

INTEGRATION EHN2 D. Brethoux (ST1340453)



Jonction TT84/EHN2





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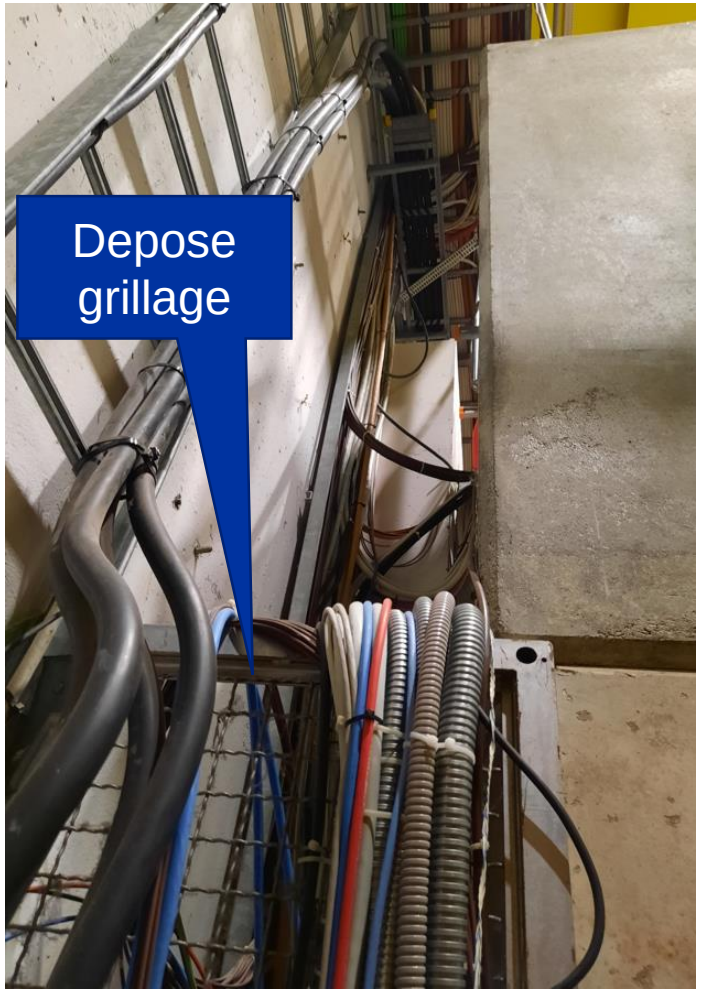
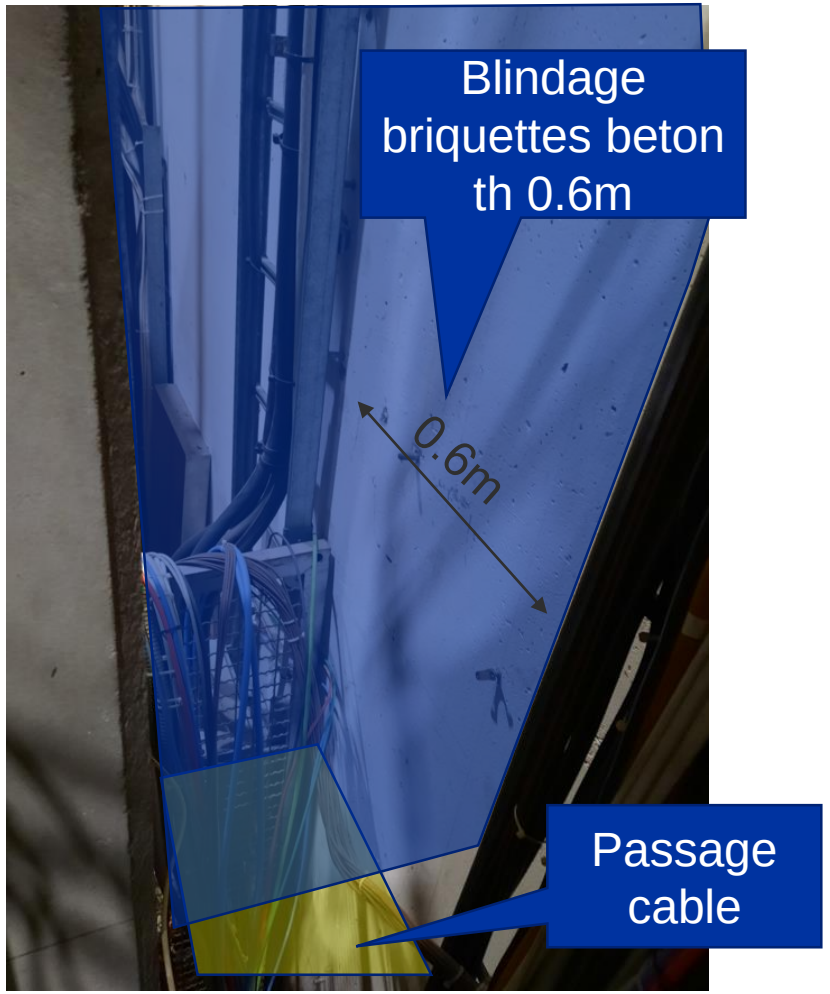




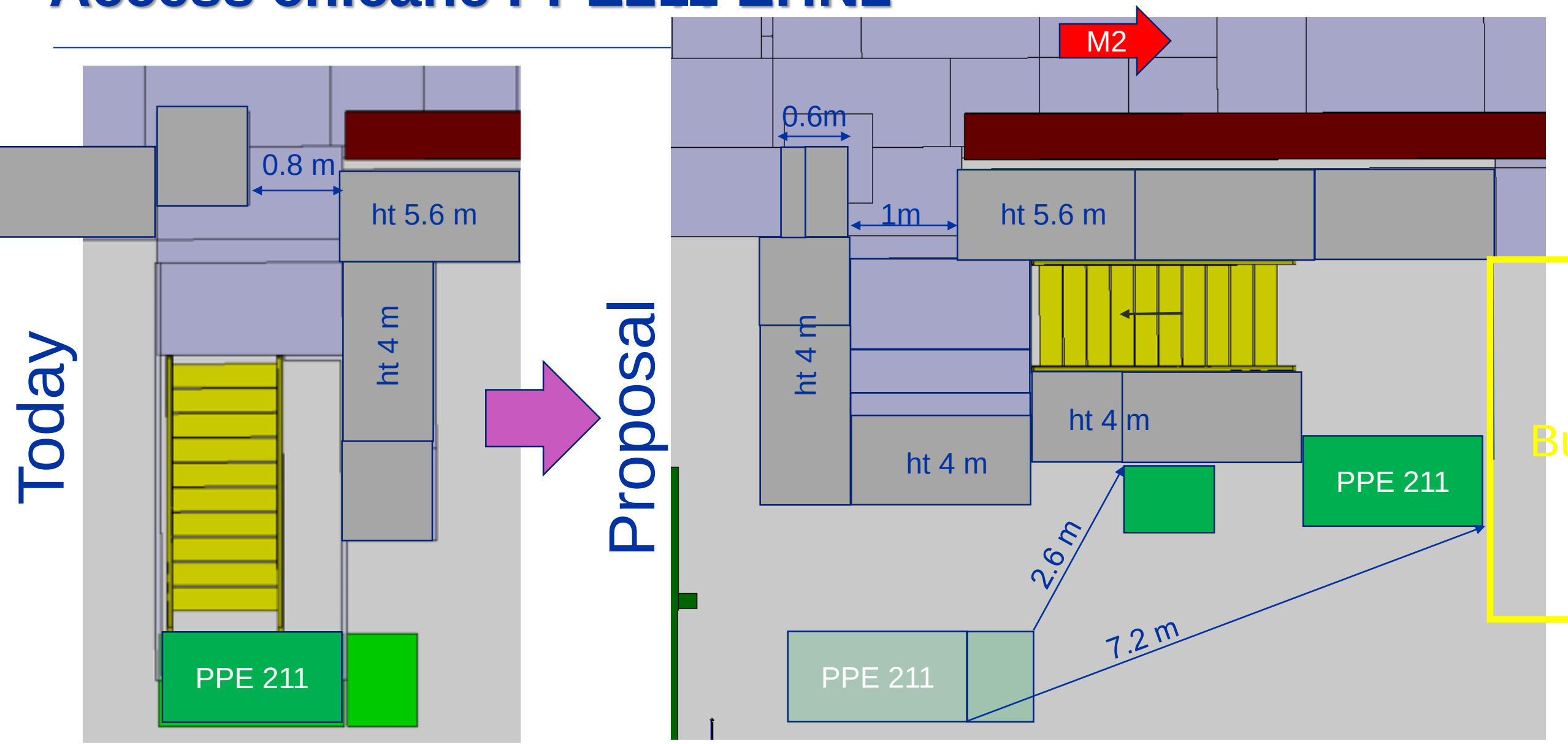
Jonction TT84/EHN2

Cost paid by BE-EA ?

Cost jonction EHN2/TT84

ITEM	Materia	Note	L [mm	l [mm	H [mm	mass [kg]	Unit cost [CHF]	Qty	Mass [t]	cost [CHF]
AC 211	Steel	briquette	200	100	100	16	0	16	0.3	0
BE 421	Concrete		400	200	100	20	0	150	3.0	0
Cable routing modification									0.0	3000
Support production									0.2	5000
Installation									0.0	3000
									Mass [t]	TOT [CHF]
									3.5	11000

Access chicane PPE211 EHN2



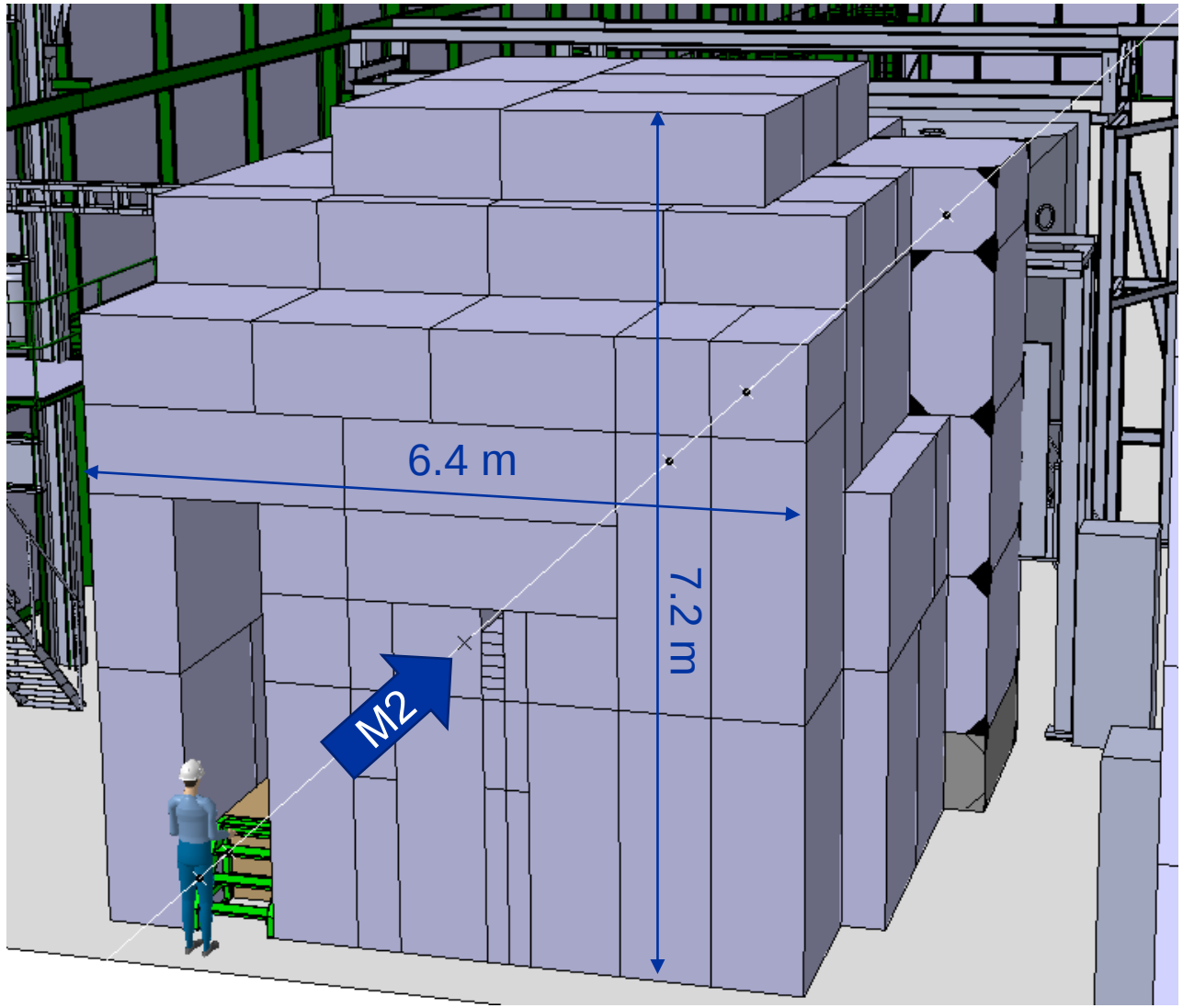
Access chicane PPE211 EHN2

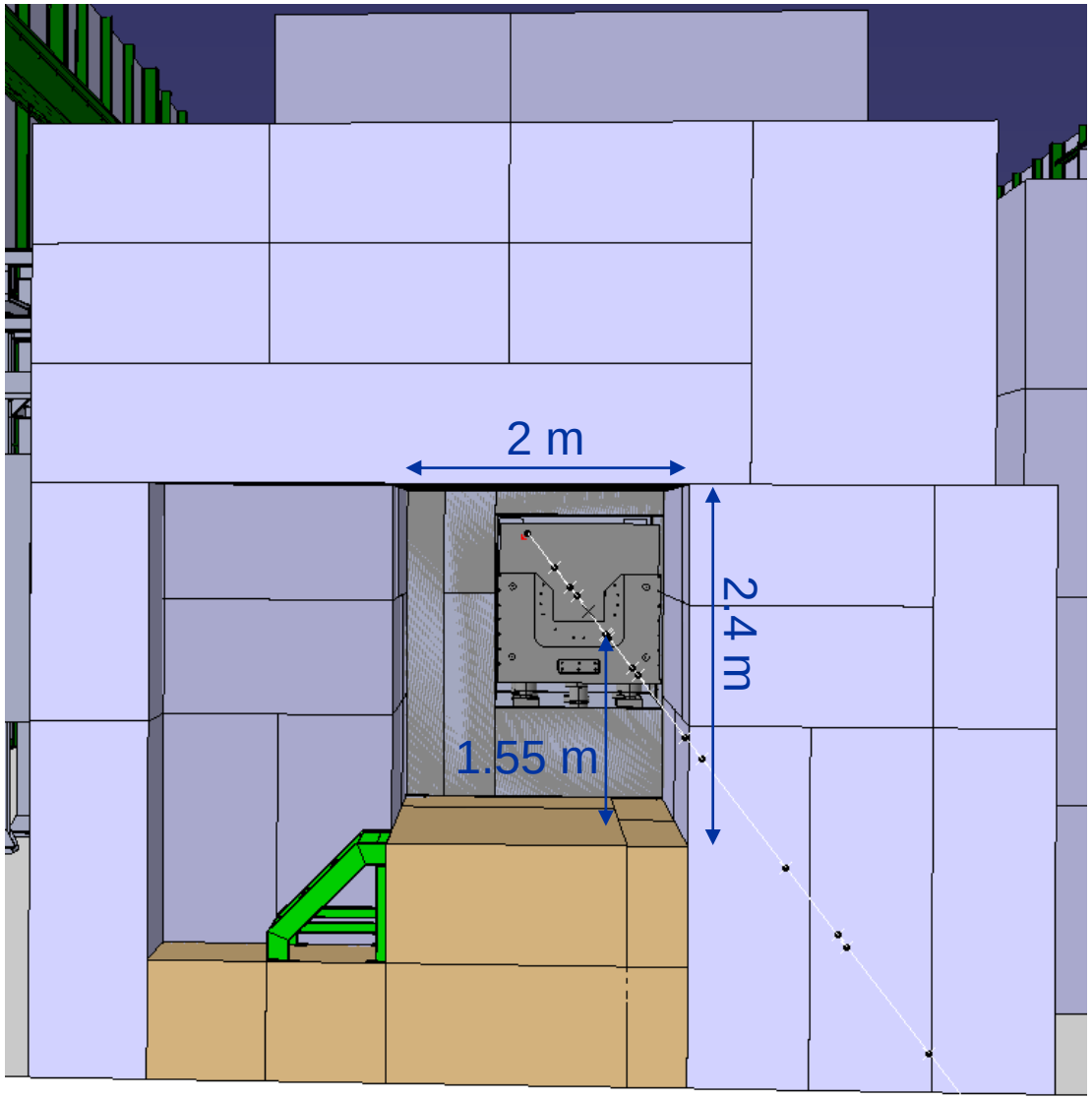
Cost paid by BE-EA ?

Cost PPE211 chicane

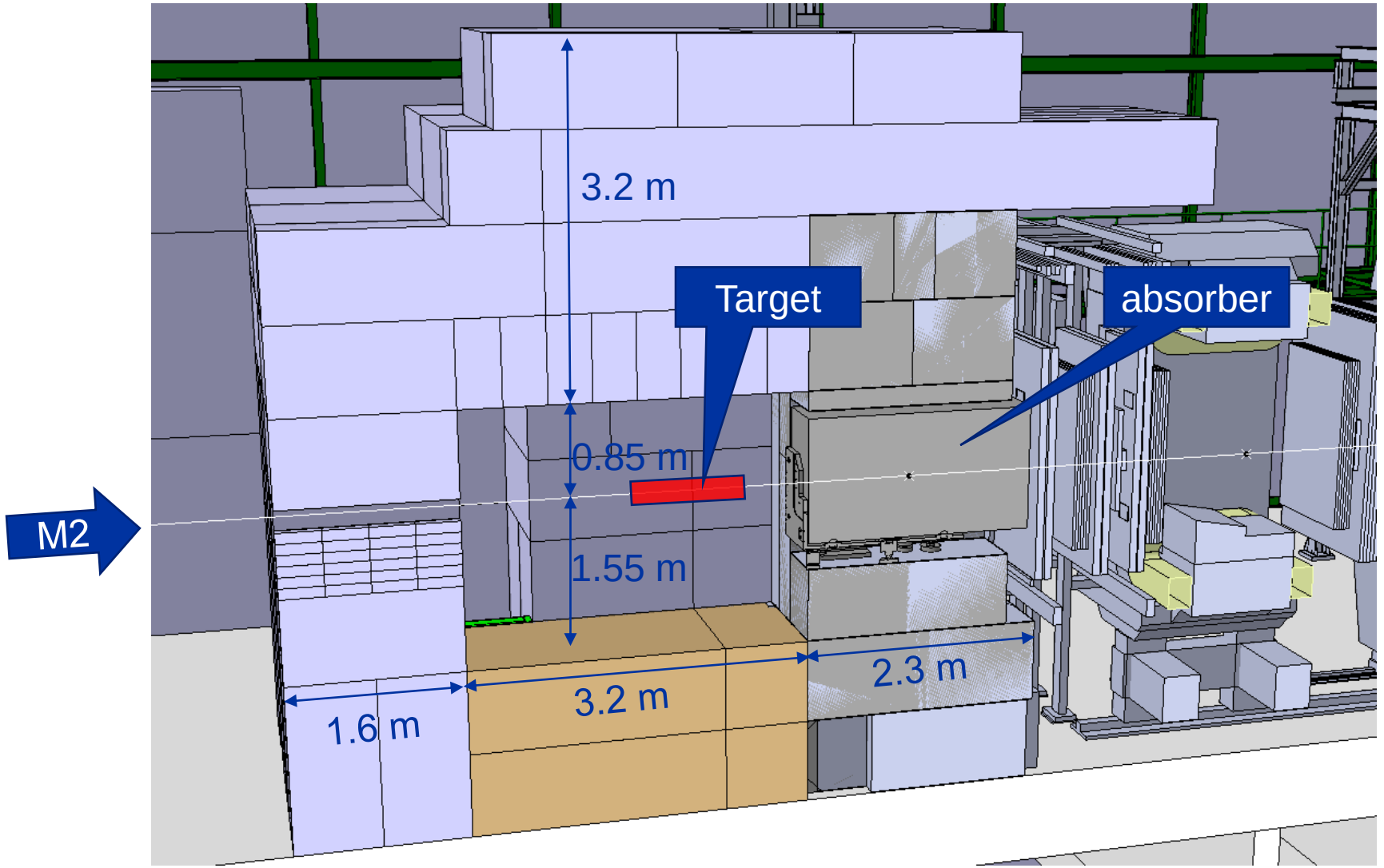
ITEM	Materia	Note	L [mm	l [mm	H [mm	Unit mass [k	Unit cost [CHF]	Qty PPE211	Mass [	cost [CHF]
BE 888	Concrete		800	800	800	1,249	360	3	3.7	1080
BE 1682	Concrete		1600	800	200	625	225	3	1.9	675
BE 1684	Concrete		1600	800	400	1,249	360	4	5.0	1440
BE 1688	Concrete		1600	800	800	2,499	610	3	7.5	1830
BE 23168	Concrete	for cable p	2300	1600	800	7,183	1,650	0	0.0	0
BE 24168	Concrete		2400	1600	800	7,496	1,700	6	45.0	10200
Cabling PPE211									0.0	10000
Fencing									0.0	5000
									Mass [t]	TOT [CHF]
									63.1	30225

AMBER Drell Yann target bunker (RP2 version)

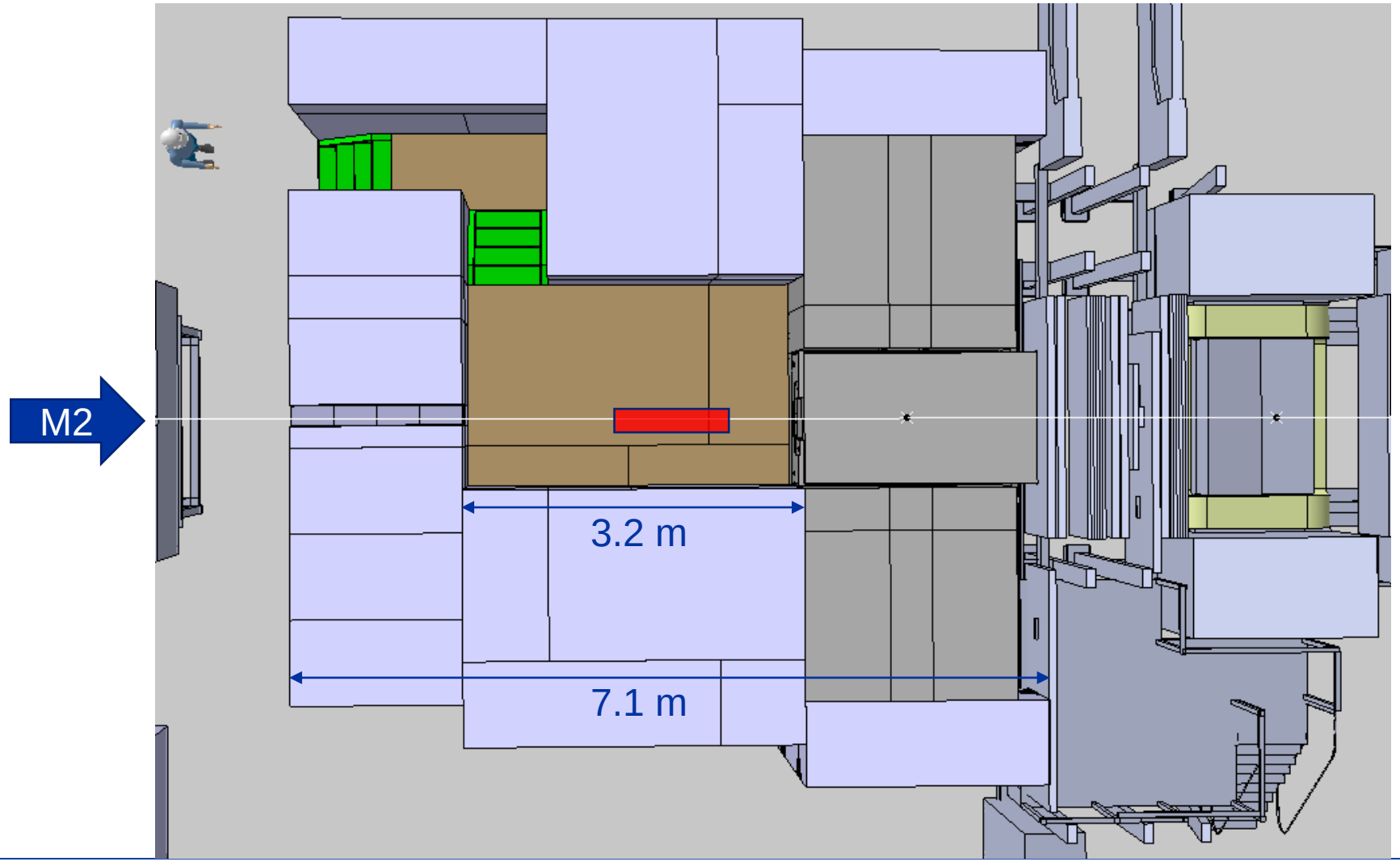




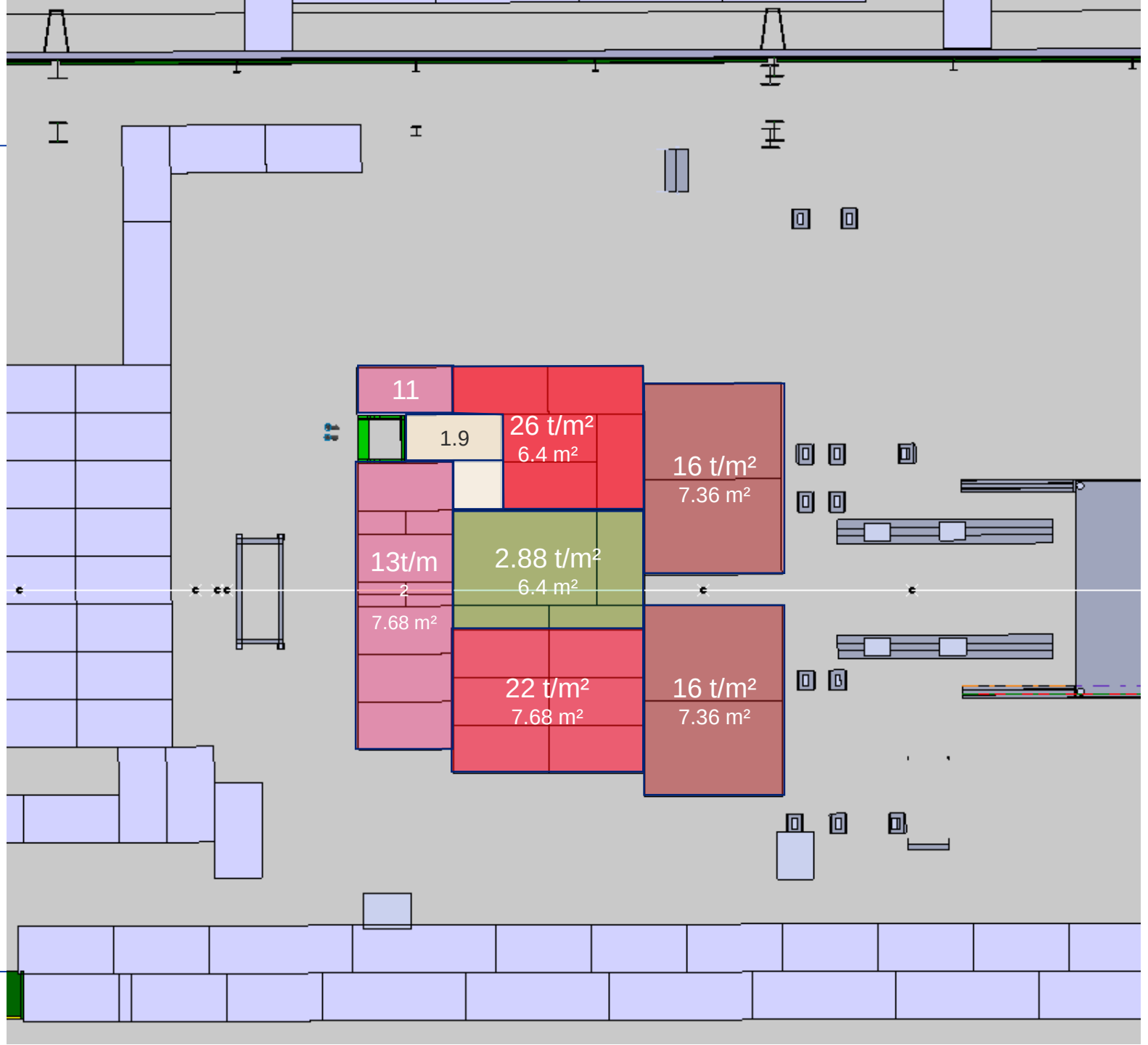
AMBER Drell Yann target bunker (RP2 version)



AMBER Drell Yann target bunker (RP2 version)



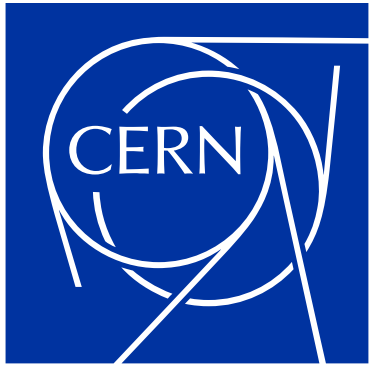
Load on floor



AMBER Drell Yann target bunker (RP2 version)

Shielding block list AMBER DRELL YANN

ITEM	Material	Note	L [mm	l [mm	H [mm	Unit mass [kg]	Unit cost [CHF]	Qty target bunker	Qty Absorbe	Qty tot	Mass [	cost [KCH
AC 211	Steel	brics	200	100	100	16				0	0.0	0
BE 421	Concrete		400	200	100	20	0	24		24	0.5	0
BE 842	Concrete		800	400	200	156	110		6	6	0.9	0.66
BE 844	Concrete		800	400	400	312	180		6	6	1.9	1.08
BE 822	Concrete		800	200	200	78				0	0.0	0
BE 882	Concrete		800	800	200	312				0	0.0	0
BE 884	Concrete		800	800	400	625	225		6	6	3.8	1.35
BE 888	Concrete		800	800	800	1,249	360	4		4	5.0	1.44
BE 1682	Concrete		1600	800	200	625	225	7	6	13	8.1	2.925
BE 1684	Concrete		1600	800	400	1,249	360	8	12	20	25.0	7.2
BE 1688	Concrete		1600	800	800	2,499	610	18		18	45.0	10.98
BE 23168	Concrete		2300	1600	800	7,183	1,650	8	7	15	107.7	24.75
BE 24168	Concrete		2400	1600	800	7,496	1,700	45	6	51	382.3	86.7
BEP 4884	Concrete		4800	800	400	3,748	1,000		2	2	7.5	2
BEP 4888	Concrete		4800	800	800	7,496	1,630	4	4	8	60.0	13.04
BEP 6484	Concrete		6400	800	400	4,997	1,290	10		10	50.0	12.9
BEP 9684	Concrete		9600	800	400	7,496				0	0.0	0
SPE BE 121221	Concrete	Special	1190	1240	2195	7,903	2,500		1	1	7.9	2.5
SPE BE 20137	Concrete	Special	2000	1310	700	4,475	1,500		1	1	4.5	1.5
SPE BE 20132	Concrete	Special	2000	1310	190	1,215	800		1	1	1.2	0.8
											Mass [t]	**TOT [KCHF]**
											711.2	**170**



https://cern.ch/be-dep-ea