Building Component Journal

-205.A.01	**External Lightweight wall**		**Page 1** **Date: 03.01.2016**
Building part/subject/location:	**Functions-and material demands for the building componnent part/sketch of construction of the component:**	**Building product: (Type,dimensions/thickness etc.)**	**Execution/build up of the construction:**
Walls outside the house	- External walls are the shield of the house against the open - You distinguish between heavy and light external walls - Load-bearing structures must be designed to withstand normally occurring static and dy-namic loads - Buildings must be built so as to prevent water, moisture and damp from causing damage or undermining serviceability, impai- ring durability and vitiating health and safety conditions - External walls shall be so con-structed that they will not be da-maged by moisture. Further, the construction shall be so made that any ingress of water can be lead out again. The insertion of damp proof courses and damp proof membranes can ensure this Insulation against moisture from the foundation … is established by placing a bitumen felt damp proof course at least 150 mm above ground level - Bitumen felt is placed above all openings in the outer leaf - Max. height : external wall along at least one longitudinal side: 3.0 m. - By dividing, Physical- limitations - By dividing, thermal - By dividing visual - By being undangerous, physical- safety - By giving firetechnical safety - By being sustainable, during age and time - By being sustainable for heat/cold - By being solid for pressure - By being strengthened - By keeping apperance as designed - By being sound deadened - By being fixable in the construction - By working well with the other components materials	20 mm Wooden Panel: Rockpanel, color Ebony 20*100 mm c/c 600 mm Counter batten 12 * 45 mm c/c 600 mm Distance strip/Distance List 9 mm Wind barrier (Weather Board - 9/900 mm type WB-3) http://www.knaufdanogips.dk/Produkter/Gipsbyggesystemer/Pladetyper/Gipsplader/Weather-Board.aspx?ProductID=PROD4634 IPE 240/ flexibattsl insulation http://www.rockwool.dk/produkter/u/7427/bygningsisolering/flexibatts DPM 45 mm Batten c/c 600 mm / flexibatts insulation http://www.rockwool.dk/produkter/u/7427/bygningsisolering/flexibatts 20 mm Plywood 12.5 / 900 mm Fibre Board Type G3 http://www.knaufdanogips.dk/Produkter/Gipsbyggesystemer/Pladetyper/Fibergipsplader.aspx?ProductID=PROD4265 Fire box http://www.rockwool.dk/produkter/u/9654/brandbeskyttelse/brandbeskyttelser-af-staal/staal---svejsestritter http://www.rockwool.dk/produkter/u/9654/brandbeskyttelse/brandbeskyttelser-af-staal/staal---svejsestritter	- We mount steel column/ beam - To keep warm inside the house we put the wood wool insulation (192mm). - On the insulation we put the wooden stud for make a pressure on insulation. Then we attached weather - On weather board we put the distance list to attached wooden cladding. - On the last step we put the wooden cladding. - We are mountinf DPM on the innre side of wall After that we are mounting studs with insulation in between We finishing with putting plywood The last step is to mount the fiber gypsum on the plywood

20 mm Wooden Panel: Rockpanel, color Ebor
20*100 mm c/c 600 mm Counter batten
12 * 45 mm c/c 600 mm Distance strip/Dista
9 mm Wind barrier (Weather Board - 9/900 mm type WB-3)
IPE 240/ mineral wool insulation
DPM
45 mm Stud c/c 600 mm / Mineral wool insulation
20 mm Plywood
12.5 / 900 mm Fibre Board Type G3