WITH CORK REGRANULATE

- composed by expanded pure cork exists in several diameters (calibre)
- sold in bags 0.5m³ ou 0.25m ³
- it is a simple and effective solution for situations such as:
  - light filling (screed)
  - filling for floor chambers
  - filling for double walls
- with a thermal conductivity of 40.25mW (m°c)
- can be used as a thermal insulation, taking of the acoustic properties of cork

EXPANDED CORK REGRANULATE LIGHT FILLING THERMAL AND ACOUSTIC INSULATION OF SLABS

Specifique weight of the regranulate: 67/75 kg/m^3
Granulometry: 3/15 mm (are possible other calibres)

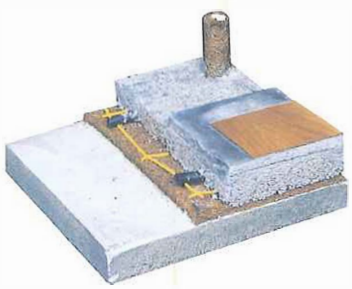
Utilization: mix the cork inside the concrete mixer with a little water to moisten the regranulate.Afterwards mix normally with cement and/or sand.

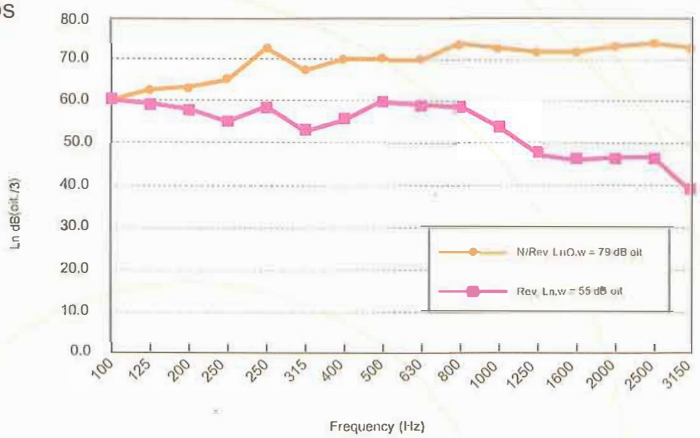
Cement	Volume Composition Sand	Regran.	Weight density (kg/m³)	Bending Resistance Comp. (kg/cm²)		Absorption Medium 400 - 1250 Hz	Thermal Conduct. W/m C°
1	0	6	400	2	3,5		0,13
1	0	4	500	6,2	5	0,7	0,18
1	2	6	900	5	6	0,2	0,24
2	3	8	1100	11	7		0,6

WITH COCONUT FIBRE (TK10)

- application of coconut fibre 10mm thick on slabs with reinforced 4cm screed
- coconut fibre as a flexible material

(LNEC/LEAC)





$L_{n0,w}$ (uncoated slab)= 79 dB (according to EN ISO 717-2: 1996)

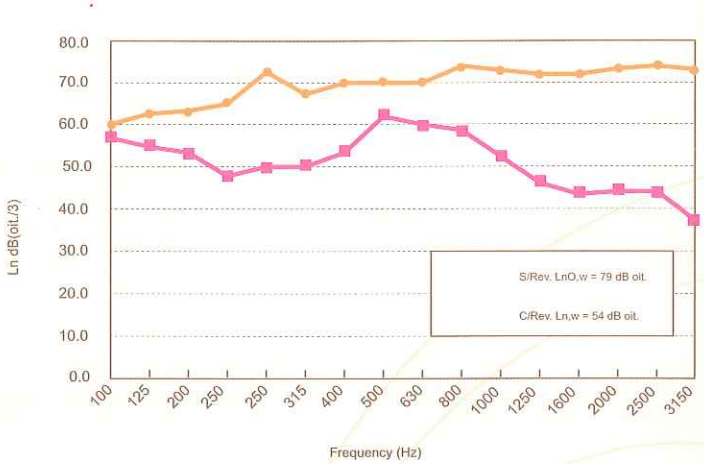
$L_{n,w}$ (coated slab)= 55 dB (according to EN ISO 717-2: 1996)

ΔLW = 22 dB (according to EN ISO 717-2: 1996)

WITH COCONUT FIBRE (TK20)

- apllication of coconut fibre 20mm thick slabs
- with reinforced 4cm screed
- coconut fibre as a flexible material

(LNEC/LEAC)



LnO,W (uncoated slab)= 79 dB (according to EN ISO 717-2: 1996)

Ln,W (coated slab)= 54 dB (according to EN ISO 717-2: 1996)

ΔLW = 24 dB (according to EN ISO 717-2: 1996)

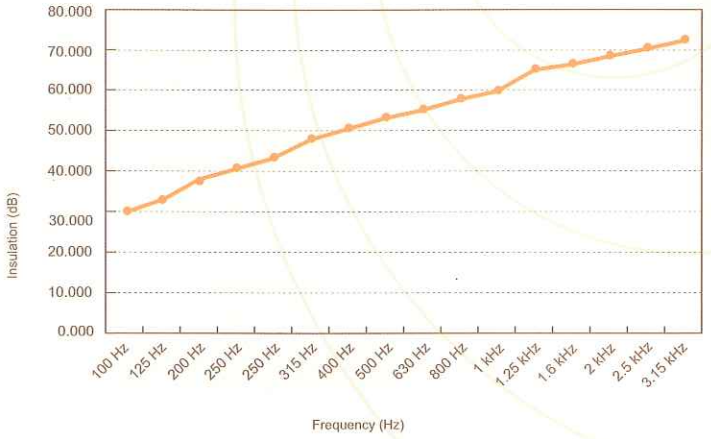
AIRBORNE NOISE

SIMPLE WALL

- simple brick wall with 11cm
- plastered in one of the sides
- on other side reinforced with a 13mm plaster slab and 20mm + 20m Corcoko

(University of Coimbra)

An economic, easy and effective solution

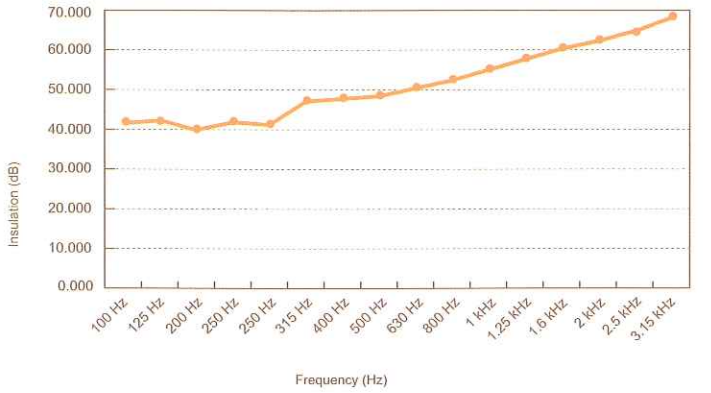


Insulation index to airborne sounds: Dn,w = 55dB

DOUBLE WALL

- double brick wall with 11cm + 15cm
- plastered on both sides
- air chamber with Corcoko

(University of Coimbra)

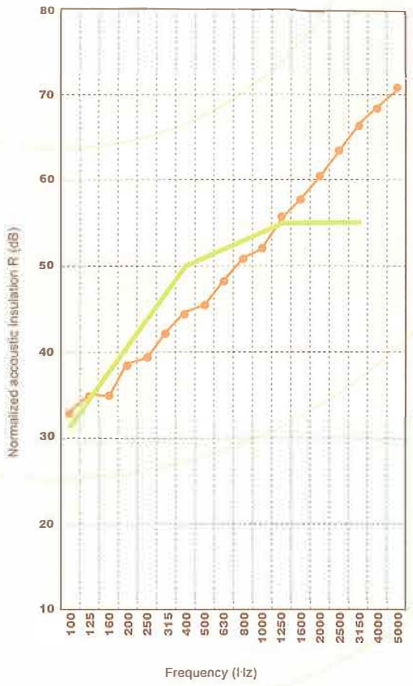


Insulation index to airborne sounds: Dn,w = 53dB

INSULATION OF PARTITIONS WITH CORK REGRANULATE

- double brick wall, 15cm + 11cm, and air chamber of 5cm
- air chamber completely filled with black regranulate of cork
- outside of the wall plstered with 2 cm of mortar
- the opening,where the test specimen was installed,presents sizes from 3.72m by 2.71m,corresponding to an area of approximately 10m²

(University of Coimbra)
Thermal conductivity coefficient - 0,040W/Km

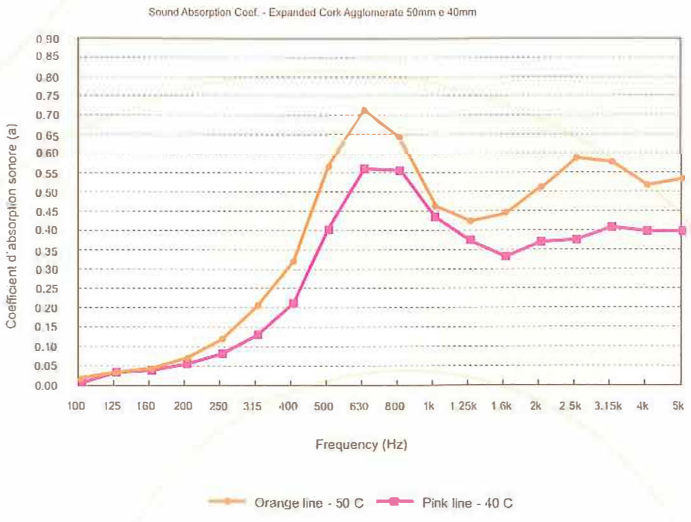


Insulation index to airborne sounds:
R_w (C ; Ctr) = 51 (-2; -6) dB

An economic, easy and effective solution

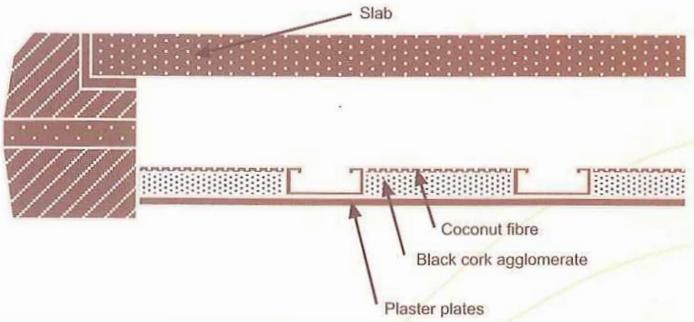
ABSORPTION / ACOUSTIC ENVIRONMENT CORRECTION

When used as a coating for walls or ceilings,the black cork agglomerate allows a reduction of the reverberation times,therefore making the sound environment of better quality and without any unwanted resonance.



FALSE CEILINGS / WALLS

- massive slab in reinforced concrete 0.14m thick
- false ceiling in plaster plate 13mm thick and with Corkoco 1+1 (40mm) with air chamber of approximately 0.35m.



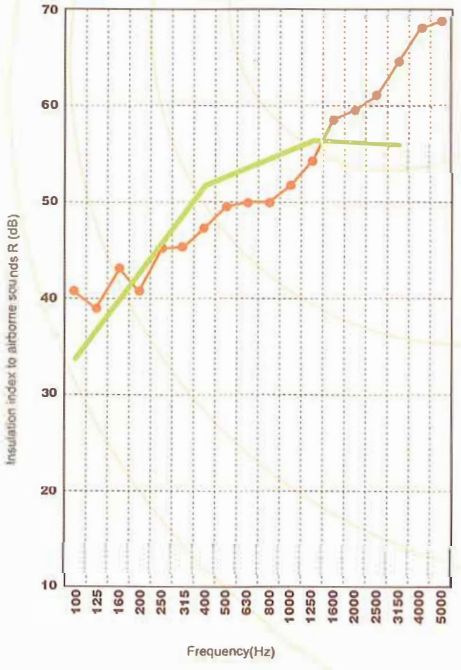
(F.E.U.P.)

	Slab	Slab w/ false ceilling
Rw (dB)	46	58

DOUBLE WALLS

- double brick wall, with 15cm + 11cm
- air chamber with 5cm
- air chamber partially filled with 40mm of black agglomerate
- plastered outside of the walls
- with 2cm of mortar
- the test opening has dimensions of 3.72m by 2.71m corresponding to an area of approximately 10m²

Result = 53 dB



R_w (C ; Ctr) = 53 (-1; -4) dB

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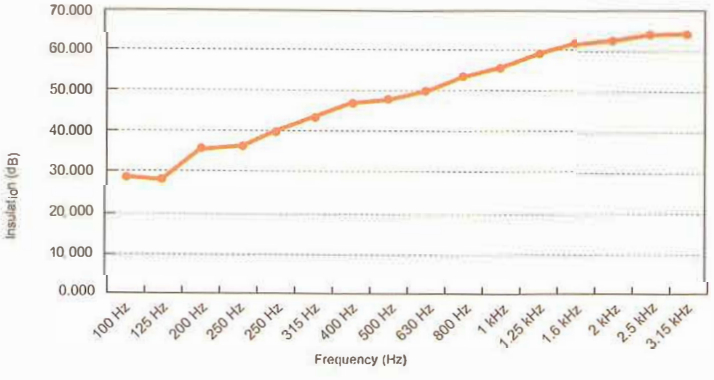
DIVIDING WALLS

- simple brick with 11cm
- plastered on both sides
- reinforced with a plaster plate 13mm thick and expanded cork agglomerate with 30mm

Result = 50 dB



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Insulation index to airborne sounds: Dn,w = 50dB