

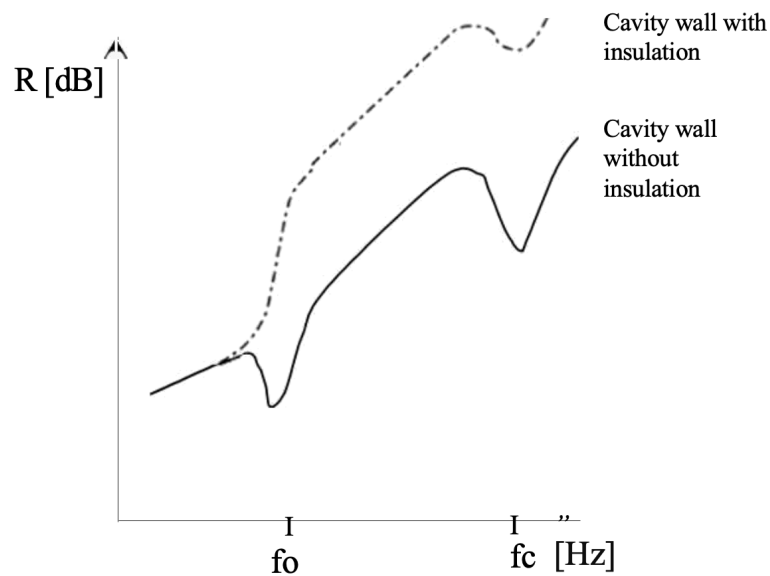


Figure 2.7. General curve of the sound reduction index for a symmetrical lightweight partition wall at different frequencies, for a double wall with and without insulation in the cavity.  
 $f_0$  = fundamental frequency,  $f_c$  = coincidence frequency.

Table 4.1 Comparison of the sound reduction index  $R_w$  for all walls

| Single-leaf walls                 |                  |    |    |
|-----------------------------------|------------------|----|----|
| Wall 1 Reference wall             | Gypsum board     | 36 |    |
| Wall 4                            | Plywood          | 33 | -3 |
| Wall 7                            | Recoma           | 39 | 3  |
| Double-leaf walls                 |                  |    |    |
| Wall 5                            | Gypsum / Gypsum  | 45 |    |
| Wall 8                            | Gypsum / Plywood | 43 | -2 |
| Wall 9                            | Recoma / Recoma  | 49 | 3  |
| Wall 10                           | Gypsum / Recoma  | 46 | 1  |
| Double-leaf walls with insulation |                  |    |    |
| Wall 3 Reference wall             | Gypsum / Gypsum  | 52 |    |
| Wall 6                            | Gypsum / Plywood | 53 | 1* |
| Wall 11                           | Recoma / Recoma  | 58 | 6  |
| Wall 12                           | Gypsum / Recoma  | 56 | 4  |

## Wall with single-layer board

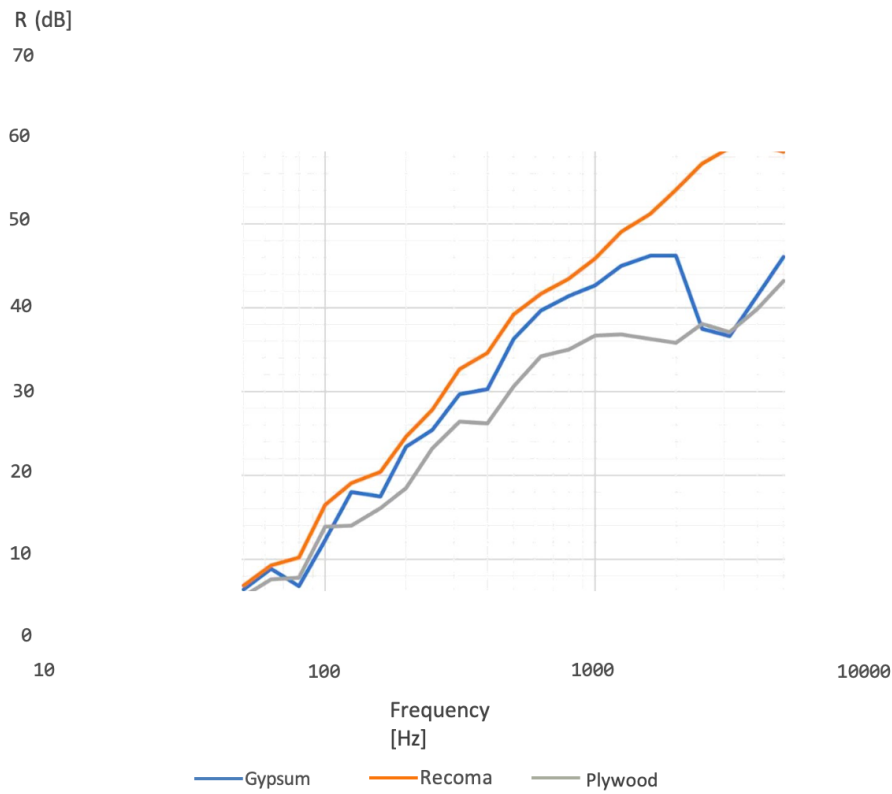


Figure 5.1 Comparison of the sound reduction index at different frequencies for all single-leaf walls

## Wall with double sheathing + insulation

