
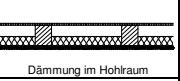
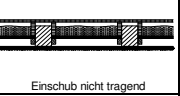
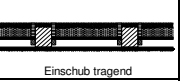

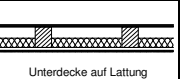
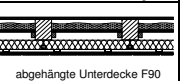
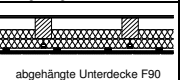


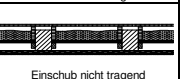
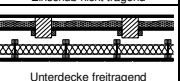
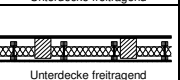


1			HAF	KNAUF	XELLA	PAVATEX			GUTEX						STEICO	
2	$L_{n,w}$ ($C_{1,50-250}$) R_w ($C_{50-5000}$; $C_{17,50-5000}$)		Rohdecken	18 GF 10 HWF	20 GF 10 HWF 30 Splitt	22 HWST 30 HWF	25 GF 20 HWF	21 Dielen 40 HWF	22 HWST 20 HWF 60 Betonsteine	22 HWST 20 HWF	21 Dielen 40 HWF	22 HWST 20 HWF	22 HWST 60 HWF	25 GF 20 HWF	15 Phonewell 9 HWF	
3	Variation	Aufbau														
4	Ist-Zust.	 24 mm Dielung 220 mm Balken Einschub $m' = 80 \text{ kg/m}^2$ Rohrputz $m' = 26 \text{ kg/m}^2$ Unterdecke verputzt	X11/12 $L_{n,w} \approx 65$ (0) dB $R_w = 50$ (-1;-10) dB	$L_{n,w} \approx 57$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 48$ (12) dB $\sigma = 2$ dB	$L_{n,w} \approx 56$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 55$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 54$ (7) dB $\sigma = 2$ dB	X27/28 $L_{n,w} \approx 48$ (4) dB $R_w = 73$ (-14;-29) dB	$L_{n,w} \approx 56$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 53$ (8) dB $\sigma = 2$ dB	$L_{n,w} \approx 56$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 53$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 53$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 52$ (6) dB $\sigma = 2$ dB	
5		 22 mm HWST 220 mm Balken 100 mm Hohlraumdämmung Rohrputz $m' = 26 \text{ kg/m}^2$ Dämmung im Hohlraum	X117/118 $L_{n,w} \approx 67$ (1) dB $R_w = 54$ (-5;-17) dB	$L_{n,w} \approx 59$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 50$ (12) dB $\sigma = 2$ dB	$L_{n,w} \approx 60$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 59$ (1) dB $\sigma = 2$ dB	$L_{n,w} \approx 59$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 59$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 53$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 61$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 58$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 60$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 57$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 56$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 56$ (7) dB $\sigma = 2$ dB
6	Sanierung von oben	 22 mm HWST 220 mm Balken, Verstärkung Einschub $m' = 120 \text{ kg/m}^2$ Rohrputz $m' = 26 \text{ kg/m}^2$ Einschub nicht tragend	X35/36 $L_{n,w} \approx 65$ (0) dB $R_w = 55$ (-2;-12) dB X73/74 $L_{n,w} \approx 65$ (1) dB $R_w = 56$ (-3;-13) dB	$L_{n,w} \approx 56$ (4) dB $R_w = 62$ (-8;-21) dB	$L_{n,w} \approx 47$ (12) dB $\sigma = 2$ dB	$L_{n,w} \approx 57$ (4) dB $R_w = 64$ (-10;-23) dB	$L_{n,w} \approx 56$ (1) dB $\sigma = 2$ dB	$L_{n,w} \approx 56$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 50$ (3) dB $\sigma = 2$ dB	X29/30 $L_{n,w} \approx 58$ (4) dB $R_w = 63$ (-8;-22) dB	X31/32 $L_{n,w} \approx 55$ (7) dB $R_w = 63$ (-9;-22) dB	X39/40 $L_{n,w} \approx 58$ (3) dB $R_w = 66$ (-11;-25) dB	X37/38 $L_{n,w} \approx 54$ (6) dB $R_w = 66$ (-11;-25) dB	X41/42 $L_{n,w} \approx 54$ (4) dB $R_w = 68$ (-12;-26) dB	$L_{n,w} \approx 53$ (6) dB $\sigma = 2$ dB	
7		 220 mm Balken, Verstärkung Einschub / zus. Auffüllung Rohrputz $m' = 26 \text{ kg/m}^2$ Einschub tragend	X79/80 (Xella) $L_{n,w} \approx 50$ (9) dB $R_w = 73$ (-17;-32) dB	$L_{n,w} \approx 49$ (9) dB $\sigma = 2$ dB		$L_{n,w} \approx 50$ (9) dB $\sigma = 2$ dB	$L_{n,w} \approx 48$ (5) dB $R_w = 73$ (-17;-32) dB	$L_{n,w} \approx 49$ (12) dB $\sigma = 2$ dB		$L_{n,w} \approx 50$ (9) dB $\sigma = 2$ dB	$L_{n,w} \approx 48$ (12) dB $\sigma = 2$ dB	$L_{n,w} \approx 50$ (9) dB $\sigma = 2$ dB	$L_{n,w} \approx 47$ (11) dB $\sigma = 2$ dB	$L_{n,w} \approx 46$ (10) dB $\sigma = 2$ dB	$L_{n,w} \approx 46$ (12) dB $\sigma = 2$ dB	
8	Sanierung von oben + unten	 22 mm HWST 200 mm Stegtträger 220 mm Balken 100 mm Hohlraumdämmung Rohrputz $m' = 26 \text{ kg/m}^2$ zus. Träger und Beplankung	X107/108 $L_{n,w} \approx 56$ (2) dB $R_w = 61$ (-6;-20) dB	$L_{n,w} \approx 49$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 40$ (14) dB $\sigma = 2$ dB	$L_{n,w} \approx 50$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 48$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 49$ (8) dB $\sigma = 2$ dB	$L_{n,w} \approx 43$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 50$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 48$ (9) dB $\sigma = 2$ dB	$L_{n,w} \approx 50$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 47$ (8) dB $\sigma = 2$ dB	$L_{n,w} \approx 46$ (8) dB $\sigma = 2$ dB	$L_{n,w} \approx 46$ (10) dB $\sigma = 2$ dB	X109/110 $L_{n,w} \approx 46$ (9) dB $R_w = 67$ (-12;-26) dB X111 (Laminat) $L_{n,w} \approx 46$ (7) dB
9		 24 mm Dielung 220 mm Balken 100 mm Hohlraumdämmung 30 mm Lattung 12,5 mm GKB Unterdecke auf Lattung	X183/184 $L_{n,w} \approx 50$ (1) dB $R_w = 65$ (-6;-21) dB	$L_{n,w} \approx 68$ (-1) dB $\sigma = 2$ dB	$L_{n,w} \approx 58$ (8) dB $\sigma = 2$ dB	$L_{n,w} \approx 65$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 64$ (1) dB $\sigma = 2$ dB	$L_{n,w} \approx 64$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 64$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 58$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 66$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 63$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 65$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 62$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 62$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 62$ (4) dB $\sigma = 2$ dB
10	Sanierung von oben + unten	 24 mm Dielung 220 mm Balken Einschub $m' = 80 \text{ kg/m}^2$ Abhänger, 100 mm Dämmung 2 x 12,5 mm GF abgehängte Unterdecke F90	X177/178 $L_{n,w} \approx 53$ (3) dB $R_w = 60$ (-5;-17) dB	$L_{n,w} \approx 44$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 33$ (15) dB $\sigma = 2$ dB	$L_{n,w} \approx 42$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 41$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 41$ (9) dB $\sigma = 2$ dB	$L_{n,w} \approx 34$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 42$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 40$ (11) dB $\sigma = 2$ dB	$L_{n,w} \approx 42$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 39$ (10) dB $\sigma = 2$ dB	$L_{n,w} \approx 39$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 38$ (9) dB $\sigma = 2$ dB	
11		 24 mm Dielung 220 mm Balken 100 mm Hohlraumdämmung Abhänger, 100 mm Dämmung 2 x 12,5 mm GF abgehängte Unterdecke F90	X1 $L_{n,w} \approx 74$ (-2) dB $R_w = 43$ (-1;-9) dB	$L_{n,w} \approx 47$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 36$ (16) dB $\sigma = 2$ dB	$L_{n,w} \approx 47$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 45$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 47$ (8) dB $\sigma = 2$ dB	$L_{n,w} \approx 47$ (8) dB $\sigma = 2$ dB	$L_{n,w} \approx 41$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 48$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 47$ (9) dB $\sigma = 2$ dB	$L_{n,w} \approx 47$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 45$ (8) dB $\sigma = 2$ dB	$L_{n,w} \approx 44$ (8) dB $\sigma = 2$ dB	$L_{n,w} \approx 44$ (9) dB $\sigma = 2$ dB
12	Sanierung von oben + unten	 24 mm Dielung 220 mm Balken Einschub $m' = 80 \text{ kg/m}^2$ 30 mm Lattung 12,5 mm GKB Unterdecke auf Lattung	X191/192 $L_{n,w} \approx 61$ (1) dB $R_w = 55$ (-5;-16) dB	$L_{n,w} \approx 67$ (-2) dB $\sigma = 2$ dB	$L_{n,w} \approx 55$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 64$ (1) dB $\sigma = 2$ dB	$L_{n,w} \approx 64$ (0) dB $\sigma = 2$ dB	$L_{n,w} \approx 63$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 57$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 65$ (1) dB $\sigma = 2$ dB	$L_{n,w} \approx 63$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 65$ (1) dB $\sigma = 2$ dB	$L_{n,w} \approx 62$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 62$ (0) dB $\sigma = 2$ dB	$L_{n,w} \approx 61$ (2) dB $\sigma = 2$ dB	
13		 24 mm Dielung 220 mm Balken Einschub $m' = 80 \text{ kg/m}^2$ 27 mm Federschiene 2 x 12,5 mm GF Einschub nicht tragend	X197/198 $L_{n,w} \approx 40$ (15) dB $R_w = 74$ (-18;-33) dB	$L_{n,w} \approx 52$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 40$ (15) dB $R_w = 74$ (-18;-33) dB	$L_{n,w} \approx 51$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 51$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 51$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 51$ (2) dB $\sigma = 2$ dB	$L_{n,w} \approx 45$ (4) dB $\sigma = 2$ dB	X195/196 $L_{n,w} \approx 51$ (7) dB $R_w = 64$ (-11;-24) dB	$L_{n,w} \approx 50$ (9) dB $\sigma = 2$ dB	$L_{n,w} \approx 51$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 48$ (9) dB $\sigma = 2$ dB	$L_{n,w} \approx 49$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 48$ (8) dB $\sigma = 2$ dB
14	Sanierung von oben + unten	 22 mm HWST 220 mm Balken, Verstärkung Einschub $m' = 120 \text{ kg/m}^2$ 27 mm Federschiene 12,5 mm GF Einschub nicht tragend	X205/206 $L_{n,w} \approx 61$ (1) dB $R_w = 57$ (-3;-14) dB	$L_{n,w} \approx 53$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 43$ (12) dB $\sigma = 2$ dB	X203/204 $L_{n,w} \approx 53$ (3) dB $R_w = 66$ (-11;-25) dB	$L_{n,w} \approx 53$ (1) dB $\sigma = 2$ dB	$L_{n,w} \approx 53$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 47$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 55$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 52$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 54$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 51$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 50$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 50$ (7) dB $\sigma = 2$ dB	
15		 24 mm Dielung 220 mm Balken Einschub $m' = 80 \text{ kg/m}^2$ Träger / Dämmung 12,5 mm GKF Unterdecke freitragend	X209/210 $L_{n,w} \approx 50$ (4) dB $R_w = 66$ (-7;-19) dB	$L_{n,w} \approx 67$ (2) dB $R_w = 48$ (-4;-15) dB	$L_{n,w} \approx 44$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 33$ (13) dB $\sigma = 2$ dB	$L_{n,w} \approx 44$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 42$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 44$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 40$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 45$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 44$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 45$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 42$ (7) dB $\sigma = 2$ dB	$L_{n,w} \approx 41$ (6) dB $\sigma = 2$ dB	$L_{n,w} \approx 42$ (7) dB $\sigma = 2$ dB
16	Sanierung von oben + unten	 24 mm Dielung 220 mm Balken Träger / Dämmung 12,5 mm GKF Unterdecke freitragend	X219/220 $L_{n,w} \approx 61$ (3) dB $R_w = 48$ (-4;-15) dB	$L_{n,w} \approx 61$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 49$ (11) dB $\sigma = 2$ dB	$L_{n,w} \approx 61$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 59$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 61$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 56$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 62$ (3) dB $\sigma = 2$ dB	$L_{n,w} \approx 60$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 61$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 59$ (4) dB $\sigma = 2$ dB	$L_{n,w} \approx 57$ (5) dB $\sigma = 2$ dB	$L_{n,w} \approx 58$ (5) dB $\sigma = 2$ dB	