# Nida drywall partition systems **catalogue of solutions** 2024



THE FIRST DRYWALL ENCASEMENT SYSTEM WITH THE C E MARKING AVAILABLE ON THE MARKET



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#### Nida Tynk anchored wall cladding

80 9,5; 12,5 82 CD/ES-12,5; CD/ES-18 84 CD/ES-25; CD/ES-27,5; CD/ES-30 86 CD/ES-37,5; CD/ES-45 88 CD/ES-50; CD/ES-55; CD/ES-60 90 CD/ES-12,5/SONIC (NO) 92 CD/ES-12,5/SONIC (N1-N8) 94 CD/EL-12,5; CD/EL-18 96 CD/EL-25; CD/EL-27,5; CD/EL-30 98 CD/EL-37,5; CD/EL-45 100 CD/EL-50; CD/EL-55; CD/EL-60 102 CD/EL-12,5/SONIC (NO) 104 CD/EL-12,5/SONIC (N1-N8) 106 CD/ES-13/RTG; CD/ES-13,5/RTG; CD/ES-14/RTG; CD/ES-14,5/RTG; CD/ES-15/RTG; CD/ES-15,5/RTG 108 PK48-12,5; PK48-18 110 PK48-25; PK48-27,5; PK48-30 112 PK48-37,5; PK48-45 **114** PK48-50; PK48-55; PK48-60 116 C100/L-12,5; C100/L-18 118 C100/L-25; C100/L-27,5; C100/L-30 120 C100/L-37,5; C100/L-45 122 C100/L-50; C100/L-55; C100/L-60 124 CC100/L-12,5; CC100/L-18 126 CC100/L-25; CC100/L-27,5; CC100/L-30 128 CC100/L-37,5; CC100/L-45 130 CC100/L-50; CC100/L-55; CC100/L-60 132 C50/PWA-12,5; C50/PWA-18 134 C50/PWA-25; C50/PWA-27,5; C50/PWA-30 136 C50/PWA-37,5; C50/PWA-45

The solutions and other kinds of information presented here were compiled on the basis of the examinations performed at independent research centres, and the Siniat Technical Development Centre, and our long-term practical experience in the field of drywall partition systems. Siniat Sp. z o.o. does not have any direct influence on the design procedure, the construction conditions and the way works are performed. We hereby declare that the guidelines presented herein are of general nature and are not to be understood as any guarantees or statements, and shall not give rise to any liabilities on the part of Siniat Sp. z o.o. We do not take responsibility for any printing errors.

138 C50/PWA-50: C50/PWA-55: C50/PWA-60

140 C75/PWA-12,5; C75/PWA-18

142 C75/PWA-25: C75/PWA-27.5: C75/PWA-30

144 C75/PWA-37.5: C75/PWA-45

146 C75/PWA-50; C75/PWA-55; C75/PWA-60

148 C100/PWA-12,5; C100/PWA-18,0

150 C100/PWA-25; C100/PWA-27,5; C100/PWA-30

152 C100/PWA-37,5; C100/PWA-45

154 C100/PWA-50; C100/PWA-55; C100/PWA-60

#### Nida Tynk independent wall cladding

172 C50-12.5: C50-18 **174** C50-25; C50-27,5; C50-30 **176** C50-37,5; C50-45 178 C50-50; C50-55; C50-60 180 C75-12,5; C75-18 **182** C75-25; C75-27,5; C75-30 184 C75-37,5; C75-45 186 C75-50; C75-55; C75-60 **188** C100-12,5; C100-18 **190** C100-25; C100-27,5; C100-30 **192** C100-37,5; C100-45 **194** C100-50; C100-55; C100-60 **196** CC50-12,5; CC50-18 **198** CC50-25; CC50-27,5; CC50-30 200 CC50-37,5; CC50-45 202 CC50-50; CC50-55; CC50-60 204 CC75-12,5; CC75-18 206 CC75-25; CC75-27,5; CC75-30 208 CC75-37,5; CC75-45 **210** CC75-50; CC75-55; CC75-60 212 CC100-12,5; CC100-18 214 CC100-25; CC100-27,5; CC100-30 216 CC100-37,5; CC100-45 218 CC100-50; CC100-55; CC100-60 220 UAR50-12,5; UAR50-18 222 UAR50-25; UAR50-27,5; UAR50-30 224 UAR50-37,5; UAR50-45 226 UAR50-50; UAR50-55; UAR50-60 228 UAR75-12,5; UAR75-18 230 UAR75-25; UAR75-27,5; UAR75-30 232 UAR75-37,5; UAR75-45 234 UAR75-50; UAR75-55; UAR75-60 236 UAR100-12,5; UAR100-18 238 UAR100-25; UAR100-27,5; UAR100-30 240 UAR100-37.5: UAR100-45 242 UAR100-50; UAR100-55; UAR100-60 244 UARUAR50-12,5; UARUAR50-18 246 UARUAR50-25; UARUAR50-27,5; UARUAR50-30 248 UARUAR50-37,5; UARUAR50-45 250 UARUAR50-50; UARUAR50-55; UARUAR50-60 252 UARUAR75-12,5; UARUAR75-18 254 UARUAR75-25; UARUAR75-27,5; UARUAR75-30 256 UARUAR75-37,5; UARUAR75-45

258 UARUAR75-50; UARUAR75-55; UARUAR75-60 260 UARUAR100-12,5; UARUAR100-18 **262** UARUAR100-25; UARUAR100-27,5; UARUAR100-30 264 UARUAR100-37,5; UARUAR100-45 266 UARUAR100-50; UARUAR100-55; UARUAR100-60 270 C50/LS-12,5; C50/LS-15; C50/LS-18 272 C50/LS-25 274 C75/LS-12,5; C75/LS-15; C75/LS-18 276 C75/LS-25 278 C100/LS-12,5; C100/LS-15; C100/LS-18 280 C100/LS-25 Nida Ściana partition walls **308** 75A50: 80A50 310 75AA50; 80AA50 312 100A75; 105A75 314 100AA75; 105AA75 **316** 125A100; 130A100 318 125AA100; 130AA100 320 75A50/RTG 322 100A75/RTG

324 125A100/RTG 326 100A50 328 100AA50 330 125A75 332 125AA75 334 150A100 336 150AA100 338 100A50/RTG 340 125A75/RTG 342 150A100/RTG **344** 125A50; 150A75; 175A100; 125AA50; 150AA75; 175AA100 346 125A50; 150A75; 175A100; 125AA50; 150AA75; 175AA100 348 75A50/LS; 100A75/LS; 125A100/LS; 75AA50/LS: 100AA75/LS: 125AA100/LS 350 100A50/LS: 125A75/LS: 150A100/LS: 100AA50/LS; 125AA75/LS; 150AA100/LS 352 100A50; 125A75; 150A100 354 100A50; 125A75; 150A100 356 100+15A50 358 100+25A50 360 125+15A75 362 125+25A75 364 150+15A100 366 150+25A100 **370** 155B50 372 155BB50 374 205B75 376 205BB75 378 255B100 380 255BB100 382 168B50; 168BB50; 218B75; 218BB75; 268B100; 268BB100 384 168B50; 168BB50; 218B75; 218BB75; 268B100; 268BB100 **386** 155B50; 205B75; 255B100 388 155B50-PWA; 205B75-PWA; 255B100-PWA

- 390 180B50; 230B75; 280B100; 180BB50; 230BB75;
- 280BB100
- 392 155B50-PWA
- 394 155BB50-PWA
- 396 205B75-PWA
- 398 205BB75-PWA

400 255B100-PWA 402 255BB100-PWA 404 180B50-PWA; 230B75-PWA; 280B100-PWA; 180BB50-PWA; 230BB75-PWA; 280BB100-PWA 406 155B50/LS; 205B75/LS; 255B100/LS; 155BB50/LS; 205BB75/LS; 255BB100/LS 410 160D50 412 160DD50 **414** 210D75 416 210DD75 418 260D100 420 260DD100 422 185D50; 235D75; 285D100; 185DD50; 235DD75; 285DD100 424 160D50-PWA 426 160DD50-PWA 428 210D75-PWA 430 210DD75-PWA 432 260D100-PWA 434 260DD100-PWA 436 185D50-PWA: 235D75-PWA: 285D100-PWA: 185DD50-PWA: 235DD75-PWA: 285DD100-PWA 438 160D50/LS; 210D75/LS; 260D100/LS; 160DD50/LS; 210DD75/LS; 260DD100/LS **442** 150C50 444 150CC50 **446** 200C75 448 200CC75 450 250C100 452 250CC100 **454** 175C50; 225C75; 275C100; 175CC50; 225CC75; 275CC100 456 150C50/LS; 200C75/LS; 250C100/LS; 150CC50/LS; 200CC75/LS; 250CC100/LS 460 S125/2 462 SS125/2 464 S150/2 466 SS150/2 468 S175/2 470 SS175/2 472 S150/3; S175/3; S200/3; SS150/3; SS175/3; SS200/3 474 87N50 476 112N75 478 137N100 480 SW150 482 SW175 484 SW190 486 SW150-400; SW150-300; SWSW150; SWSW150-400; SWSW150-300 **490** 75G50; 100G75; 125G100; 87,5G50; 112,5G75; 137,5G100 492 SLA **494** 70A50: 95A75: 120A100: 99A75: 124A100 **496** 90A50; 98A50; 115A75; 123A75; 140A100; 148A100 498 145B50-PWA; 153B50-PWA; 195B75-PWA; 203B75-PWA 245B100-PWA; 253B100-PWA 500 140C50; 148C50; 190C75; 198C75; 240C100; 248C100 Nida Ściana anti-burglar walls

514 75A50-300/RESISTEX; 75AA50-300/RESISTEX: 100A75-300/RESISTEX; 100AA75-300/RESISTEX; 125A100-300/RESISTEX: 125AA100-300/RESISTEX

- 516 100A50/EXPERT+RESISTEX; 100AA50/EXPERT+RESISTEX; 125A75/EXPERT+RESISTEX: 125AA75/EXPERT+RESISTEX; 150A100/EXPERT+RESISTEX; 150AA100/EXPERT+RESISTEX
- 518 155B50/EXPERT+RESISTEX: 155BB50/EXPERT+RESISTEX; 205B75/EXPERT+RESISTEX; 205BB75/EXPERT+RESISTEX; 255B100/EXPERT+RESISTEX; 255BB100/EXPERT+RESISTEX
- 520 155B50-PWA/EXPERT+RESISTEX; 155BB50-PWA/EXPERT+RESISTEX; 205B75-PWA/EXPERT+RESISTEX; 205BB75-PWA/EXPERT+RESISTEX; 255B100-PWA/EXPERT+RESISTEX; 255BB100-PWA/EXPERT+RESISTEX
- 522 150C50/EXPERT+RESISTEX; 150CC50/EXPERT+RESISTEX: 200C75/EXPERT+RESISTEX: 200CC75/EXPERT+RESISTEX; 250C100/EXPERT+RESISTEX; 250CC100/EXPERT+RESISTEX
- 524 100A50/OGIEŃ PLUS + RESISTEX; 100AA50/OGIEŃ PLUS + RESISTEX; 125A75/OGIEŃ PLUS + RESISTEX; 125AA75/OGIEŃ PLUS + RESISTEX; 150A100/OGIEŃ PLUS + RESISTEX; 150AA100/OGIEŃ PLUS + RESISTEX
- 526 155B50/OGIEŃPLUS + RESISTEX; 155BB50/OGIEŃPLUS + RESISTEX; 205B75/OGIEŃPLUS + RESISTEX; 205BB75/OGIEŃPLUS + RESISTEX; 255B100/OGIEŃPLUS + RESISTEX: 255BB100/OGIEŃPLUS + RESISTEX
- 528 155B50-PWA/OGIENPLUS + RESISTEX; 155BB50-PWA/OGIENPLUS + RESISTEX; 205B75-PWA/OGIEŃPLUS + RESISTEX; 205BB75-PWA/OGIEŃPLUS + RESISTEX; 255B100-PWA/OGIEŃPLUS + RESISTEX; 255BB100-PWA/OGIENPLUS + RESISTEX
- 530 150C50/OGIEŃ PLUS + RESISTEX; 150CC50/0GIEŃ PLUS + RESISTEX; 200C75/OGIEŃ PLUS + RESISTEX; 200CC75/OGIEŃ PLUS + RESISTEX; 250C100/OGIEŃ PLUS + RESISTEX; 250CC100/OGIEŃ PLUS + RESISTEX
- 532 100A50/CICHA; 100AA50/CICHA; 125A75/CICHA: 125AA75/CICHA: 150A100/CICHA; 150AA100/CICHA
- 534 155B50/CICHA; 155BB50/CICHA; 205B75/CICHA; 205BB75/CICHA; 255B100/CICHA; 255BB100/CICHA
- 536 155B50-PWA/CICHA; 155BB50-PWA/CICHA; 205B75-PWA/CICHA; 205BB75-PWA/CICHA; 255B100-PWA/CICHA; 255BB100-PWA/CICHA
- 538 150C50/CICHA; 150CC50/CICHA; 200C75/CICHA; 200CC75/CICHA; 250C100/CICHA; 250CC100/CICHA 540 100A50/RESISTEX; 100AA50/RESISTEX;

125A75/RESISTEX; 125AA75/RESISTEX; 150A100/RESISTEX; 150AA100/RESISTEX

- 542 155B50/RESISTEX; 155BB50/RESISTEX; 205B75/RESISTEX; 205BB75/RESISTEX; 255B100/RESISTEX; 255BB100/RESISTEX
- 544 155B50-PWA/RESISTEX; 155BB50-PWA/RESISTEX 205B75-PWA/RESISTEX: 205BB75-PWA/RESISTEX: 255B100-PWA/RESISTEX; 255BB100-PWA/RESISTEX
- 546 150C50/RESISTEX; 150CC50/RESISTEX; 200C75/RESISTEX; 200CC75/RESISTEX; 250C100/RESISTEX; 250CC100/RESISTEX
- 548 125AA75/OGIEŃ PLUS + (BS) TWARDA; 125AA75/WODAOGIEŃ PLUS + (BS) TWARDA; 150AA100/OGIEŃ PLUS + (BS) TWARDA; 150AA100/WODAOGIEŃ PLUS + (BS) TWARDA
- 550 205BB75/OGIEŃ PLUS + (BS) TWARDA; 205BB75/WODAOGIEŃ PLUS + (BS) TWARDA; 255BB100/OGIEŃ PLUS + (BS) TWARDA; 255BB100/WODAOGIEŃ PLUS + (BS) TWARDA
- 552 205BB75-PWA/OGIEŃ PLUS + (BS) TWARDA: 205BB75-PWA/WODAOGIEŃ PLUS + (BS) TWARDA; 255BB100-PWA/OGIEŃ PLUS + (BS) TWARDA; 255BB100-PWA/WODAOGIEŃ PLUS + (BS) TWARDA
- 554 200CC75/OGIEŃ PLUS + (BS) TWARDA; 200CC75/WODAOGIEŃ PLUS + (BS) TWARDA; 250CC100/OGIEŃ PLUS + (BS) TWARDA; 250CC100/WODAOGIEŃ PLUS + (BS) TWARDA

### Nida Sufit suspended ceilings

- 576 PK48/12,5; PK48/15; PK48/18
- 578 PK48/25; PK48/27,5; PK48/30
- 580 PK48/37.5: PK48/40: PK48/55: PK48/60
- 582 ES/CD60-12.5: ES/CD60-15: ES/CD60-18
- 584 ES/CD60-25; ES/CD60-27,5; ES/CD60-30
- 586 ES/CD60-37,5; ES/CD60-40; ES/CD60-55; ES/CD60-60
- 588 EL/CD60-12,5; EL/CD60-15; EL/CD60-18
- 590 EL/CD60-25; EL/CD60/27,5; EL/CD60-30
- 592 EL/CD60-37,5; EL/CD60-40; EL/CD60-55; EL/CD60-60
- 594 WP/CD60-12,5; WP/CD60-15; WP/CD60-18
- 596 WP/C60-25; WP/CD60-27,5; WP/CD60-30
- 598 WP/CD60-37,5; WP/CD60-40; WP/CD60-55; WP/CD60-60
- 600 WO/CD60-12,5; WO/CD60-25
- 602 WON/CD60-12,5; WON/CD60-15; WON/CD60-18
- 604 WON/CD60-25; WON/CD60-27,5; WON/CD60-30 606 WON/CD60-37,5; WON/CD60-40; WON/CD60-55; WON/CD60-60
- 608 JK/ES/CD60-12.5: JK/ES/CD60-15: JK/ES/CD60-18
- 610 JK/ES/CD60-25; JK/ES/CD60-27,5; JK/ES/CD60-30
- 612 JK/ES/CD60-37,5; JK/ES/CD60-40; JK/ES/CD60-55; JK/ES/CD60-60
- 614 JK/EL/CD60-12,5; JK/EL/CD60-15; JK/EL/CD60-18
- 616 JK/EL/CD60-25; JK/EL/CD60-27,5; JK/EL/CD60-30
- 618 JK/EL/CD60-37,5; JK/EL/CD60-40; JK/EL/CD60-55; JK/EL/CD60-60
- 620 JK/WP/CD60-12,5; JK/WP/CD60-15; JK/WP/CD60-18
- 622 JK/WP/CD60-25; JK/WP/CD60-27,5; JK/WP/CD60-30
- 624 JK/WP/CD60-37,5; JK/WP/CD60-40; JK/WP/CD60-55; JK/WP/CD60-60
- 626 JK/WO/CD60-12,5; JK/WO/CD60-25



- 628 JK/WON/CD60-12,5; JK/WON/CD60-15; JK/WON/CD60-18 752 C75/U75/PD/500-25; C75/U75/PD/500-27,5;
- 630 JK/WON/CD60-25; JK/WON/CD60-27,5; JK/WON/CD60-30
- 632 JK/WON/CD60-37,5; JK/WON/CD60-40;
- JK/WON/CD60-55; JK/WON/CD60-60
- 634 DK/ES/CD60-12.5: DK/ES/CD60-15: DK/ES/CD60-18
- 636 DK/ES/CD60-25; DK/ES/CD60-27,5; DK/ES/CD60-30
- 638 DK/ES/CD60- 37,5; DK/ES/CD60-40; DK/ES/CD60-55; DK/ES/CD60-60
- 640 DK/EL/CD60-12.5: DK/EL/CD60-15: DK/EL/CD60-18
- 642 DK/EL/CD60-25; DK/EL/CD60-27,5; DK/EL/CD60-30
- 644 DK/EL/CD60-37,5; DK/EL/CD60-40; DK/EL/CD60-55; DK/EL/CD60-60
- 646 DK/WP/CD/60-12,5; DK/WP/CD/60-15; DK/WP/CD/60-18
- 648 DK/WP/CD60-25; DK/WP/CD60-27,5; DK/WP/CD60-30
- 650 DK/WP/CD60-37,5; DK/WP/CD60-40; DK/WP/CD60-55; DK/WP/CD60-60
- 652 DK/WO/CD60-12,5; DK/WO/CD60-25
- 654 DK/WON/CD60-12,5; DK/WON/CD60-15; DK/WON/CD60-18
- 656 DK/WON/CD60-25; DK/WON/CD60-27,5; DK/WON/CD60-30
- 658 DK/WDNW/CD60-25/MW: DK/WDNW/CD60-30/MW
- 660 DK/WON/CD60-37.5: DK/WON/CD60-40: DK/WON/CD60-55; DK/WON/CD60-60
- 662 DK/WON/CD60-13/RTG; DK/WON/CD60-13,5/RTG; DK/WON/CD60-14/RTG; DK/WON/CD60-14,5/RTG; DK/WON/CD60-15/RTG; DK/WON/CD60-15,5/RTG
- 666 DK/MFC-12,5; DK/MFC-15; DK/MFC-18
- 668 DK/MFC-25; DK/MFC-27,5; DK/MFC-30
- 670 DK/MFC-37,5; DK/MFC-40; DK/MFC-55; DK/MFC-60
- 672 ES/CD60-12,5/GIĘTA; EL/CD60-12,5/GIĘTA; WP/CD60-12,5/GIĘTA
- 674 DK/WO/CD60-12,5/SONIC
- 676 DK/WO/CD60-12,5/SONIC
- 678 DK/WON/CD60-12,5; DK/WON/CD60-25; DK/WON/ CD60-37,5; DK/WON/CD60-50; DK/WON/CD60-62,5
- 680 DK/PG/UA/CD60-12.5: DK/PG/UA/CD60-25
- 682 DK/PG/UA/CD60-60/MW;

#### Nida Sufit self-supporting ceilings

- 726 C50/U50/500-12.5; C50/U50/500-15; C50/U50/500-18
- 728 C50/U50/500-25; C50/U50/500-27,5; C50/U50/500-30
- **730** C50/U50/500-37,5; C50/U50/500-40; C50/U50/500-55; C50/U50/500-60
- **732** C75/U75/500-12,5; C75/U75/500-15; C75/U75/500-18
- **734** C75/U75/500-25; C75/U75/500-27,5; C75/U75/500-30
- 736 C75/U75/500-37,5; C75/U75/500-40; C75/U75/500-55; C75/U75/500-60
- 738 C100/U100/500-12.5: C100/U100/500-15: C100/U100/500-18
- 740 C100/U100/500-25; C100/U100/500-27,5; C100/U100/500-30
- 742 C100/U100/500-37,5; C100/U100/500-40; C100/U100/500-55; C100/U100/500-60
- 744 C50/U50/PD/500-12,5; C50/U50/PD/500-15; C50/U50/PD/500-18
- 746 C50/U50/PD/500-25; C50/U50/PD/500-27,5; C50/U50/PD/500-30
- 748 C50/U50/PD/500-37,5; C50/U50/PD/500-40; C50/U50/PD/500-55; C50/U50/PD/500-60
- 750 C75/U75/PD/500-12.5: C75/U75/PD/500-15: C75/U75/PD/500-18

- C75/U75/PD/500-30
- 754 C75/U75/PD/500-37,5; C75/U75/PD/500-40; C75/U75/PD/500-55; C75/U75/PD/500-60
- 756 C100/U100/PD/500-12.5: C100/U100/PD/500-15: C100/U100/PD/500-18
- 758 C100/U100/PD/500-25; C100/U100/PD/500-27,5; C100/U100/PD/500-30
- 760 C100/U100/PD/500-37.5; C100/U100/PD/500-40; C100/U100/PD/500-55; C100/U100/PD/500-60
- 762 CC50/U50/500-12,5; CC50/U50/500-15; CC50/U50/500-18
- 764 CC50/U50/500-25; CC50/U50/500-27,5; CC50/U50/500-30
- 766 CC50/U50/500-37,5; CC50/U50/500-40; CC50/U50/500-55; CC50/U50/500-60
- 768 CC75/U75/500-12,5; CC75/U75/500-15; CC75/U75/500-18
- 770 CC75/U75/500-25; CC75/U75/500-27,5; CC75/U75/500-30
- 772 CC75/U75/500-37,5; CC75/U75/500-40; CC75/U75/500-55; CC75/U75/500-60
- 774 CC100/U100/500-12.5: CC100/U100/500-15: CC100/U100/500-18
- 776 CC100/U100/500-25; CC100/U100/500-27,5; CC100/U100/500-30
- 778 CC100/U100/500-37,5; CC100/U100/500-40; CC100/U100/500-55; CC100/U100/500-60
- 780 CC50/U50/PD/500-12,5; CC50/U50/PD/500-15; CC50/U50/PD/500-18
- 782 CC50/U50/PD/500-25; CC50/U50/PD/500-27,5; CC50/U50/PD/500-30
- 784 CC50/U50/PD/500-37,5; CC50/U50/PD/500-40; CC50/U50/PD/500-55; CC50/U50/PD/500-60
- 786 CC75/U75/PD/500-12,5; CC75/U75/PD/500-15; CC75/U75/PD/500-18
- 788 CC75/U75/PD/500-25; CC75/U75/PD/500-27,5; CC75/U75/PD/500-30
- 790 CC75/U75/PD/500-37,5; CC75/U75/PD/500-40; CC75/U75/PD/500-55; CC75/U75/PD/500-60
- 792 CC100/U100/PD/500-12,5; CC100/U100/PD/500-15; CC100/U100/PD/500-18
- 794 CC100/U100/PD/500-25; CC100/U100/PD/500-27,5; CC100/U100/PD/500-30
- 796 CC100/U100/PD/500-37,5; CC100/U100/PD/500-40; CC100/U100/PD/500-55; CC100/U100/PD/500-60
- 798 UAR50/U50/500-12,5; UAR50/U50/500-15; UAR50/U50/500-18
- 800 UAR50/U50/500-25; UAR50/U50/500-27,5; UAR50/U50/500-30
- 802 UAR50/U50/500-37,5; UAR50/U50/500-40; UAR50/U50/500-55; UAR50/U50/500-60
- 804 UAR75/U75/500-12.5; UAR75/U75/500-15; UAR75/U75/500-18
- 806 UAR75/U75/500-25; UAR75/U75/500-27,5; UAR75/U75/500-30
- 808 UAR75/U75/500-37,5; UAR75/U75/500-40; UAR75/U75/500-55; UAR75/U75/500-60
- 810 UAR100/U100/500-12,5; UAR100/U100/500-15; UAR100/U100/500-18
- 812 UAR100/U100/500-25; UAR100/U100/500-27,5; UAR100/U100/500-30
- 814 UAR100/U100/500-37,5; UAR100/U100/500-40; UAR100/U100/500-55; UAR100/U100/500-60

- 816 UAR50/U50/PD/500-12.5: UAR50/U50/PD/500-15: UAR50/U50/PD/500-18
- 818 UAR50/U50/PD/500-25; UAR50/U50/PD/500-27,5; UAR50/U50/PD/500-30
- 820 UAR50/U50/PD/500-37,5; UAR50/U50/PD/500-40; UAR50/U50/PD/500-55; UAR50/U50/PD/500-60
- 822 UAR75/U75/PD/500-12,5; UAR75/U75/PD/500-15; UAR75/U75/PD/500-18
- 824 UAR75/U75/PD/500-25; UAR75/U75/PD/500-27.5; UAR75/U75/PD/500-30
- 826 UAR75/U75/PD/500-37,5; UAR75/U75/PD/500-40; UAR75/U75/PD/500-55; UAR75/U75/PD/500-60
- 828 UAR100/U100/PD/500-12,5; UAR100/U100/PD/500-15; UAR100/U100/PD/500-18
- 830 UAR100/U100/PD/500-25; UAR100/U100/PD/500-27,5; UAR100/U100/PD/500-30
- 832 UAR100/U100/PD/500-37,5; UAR100/U100/PD/500-40;
- UAR100/U100/PD/500-55; UAR100/U100/PD/500-60 834 UARUAR50/U50/500-12,5; UARUAR50/U50/500-15;
- UARUAR50/U50/500-18
- 836 UARUAR50/U50/500-25; UARUAR50/U50/500-27,5; UARUAR50/U50/500-30
- 838 UARUAR50/U50/500-37.5; UARUAR50/U50/500-40; UARUAR50/U50/500-55; UARUAR50/U50/500-60
- 840 UARUAR75/U75/500-12,5; UARUAR75/U75/500-15; UARUAR75/U75/500-18
- 842 UARUAR75/U75/500-25; UARUAR75/U75/500-27,5;
- UARUAR75/U75/500-30
- 844 UARUAR75/U75/500-37,5; UARUAR75/U75/500-40; UARUAR75/U75/500-55; UARUAR75/U75/500-60
- 846 UARUAR100/U100/500-12,5; UARUAR100/U100/500-15; UARUAR100/U100/500-18
- 848 UARUAR100/U100/500-25; UARUAR100/U100/500-27,5; UARUAR100/U100/500-30
- 850 UARUAR100/U100/500-37.5: UARUAR100/U100/500-40: UARUAR100/U100/500-55; UARUAR100/U100/500-60
- 852 UARUAR50/U50/PD/500-12,5; UARUAR50/U50/PD/500-15; UARUAR50/U50/PD/500-18
- 854 UARUAR50/U50/PD/500-25; UARUAR50/U50/PD/500-27,5; UARUAR50/U50/PD/500-30
- 856 UARUAR50/U50/PD/500-37,5; UARUAR50/U50/PD/500-40; UARUAR50/U50/PD/500-55; UARUAR50/U50/PD/500-60
- 858 UARUAR75/U75/PD/500-12,5; UARUAR75/U75/PD/500-15: UARUAR75/U75/PD/500-18
- 860 UARUAR75/U75/PD/500-25; UARUAR75/U75/PD/500-27,5; UARUAR75/U75/PD/500-30 862 UARUAR75/U75/PD/500-37,5;

UARUAR75/U75/PD/500-40;

UARUAR75/U75/PD/500-55;

UARUAR75/U75/PD/500-60

864 UARUAR100/U100/PD/PD/500-12,5;

UARUAR100/U100/PD/PD/500-15;

UARUAR100/U100/PD/PD/500-18

866	UARUAR100/U100/PD/500-25;
	UARUAR100/U100/PD/500-27,5;
	UARUAR100/U100/PD/500-30
868	UARUAR100/U100/PD/500-37,5;
	UARUAR100/U100/PD/500-40;
	UARUAR100/U100/PD/500-55;
	UARUAR100/U100/PD/500-60
870	C100/U100/PD/500/15-15; CC100/U100/PD/500/15-15
872	C100/U100/PD/500/15-30; CC100/U100/PD/500/15-30
874	C100/U100/PD/500/15-30; CC100/U100/PD/500/15-30
876	C100/U100/PD/500/30-55; CC100/U100/PD/500/30-55
878	C100/U100/PD/500/30-30; CC100/U100/PD/500/30-30
880	UAR100/U100/PD/500/15-15;
	UARUAR100/U100/PD/500/15-15
882	UAR100/U100/PD/500/15-30;
	UARUAR100/U100/PD/500/15-30
884	UAR100/U100/PD/500/15-30;
	UARUAR100/U100/PD/500/15-30
886	UAR100/U100/PD/500/30-55;
	UARUAR100/U100/PD/500/30-55
888	UAR100/U100/PD/500/30-30;
	UARUAR100/U100/PD/500/30-30

#### Nida Poddasze loft encasements

- 902 WP/CD60/12,5; WP/CD60/15
- 904 WP/CD60/25; WP/CD60/30
- 906 WP/CD60/37,5

#### 908 ES/CD60/12,5; ES/CD60/15

- 910 ES/CD60/25; ES/CD60/30; ES/CD60/37,5
- 912 EL/CD60/12,5; EL/CD60/15
- 914 EL/CD60/25; EL/CD60/30; EL/CD60/37,5
- 916 PK/12.5: PK/15
- 918 PK/25; PK/30; PK/37,5
- 920 LD/12,5; LD/15
- 922 LD/25: LD/30: LD/37.5
- 924 ES/DK/CD60/12.5: ES/DK/CD60/15
- 926 ES/DK/CD60/25; ES/DK/CD60/30; ES/DK/CD60/37,5
- 928 EL/DK/CD60/12,5; EL/DK/CD60/15
- 930 EL/DK/CD60/25; EL/DK/CD60/30; EL/DK/CD60/37,5
- 932 DK/MFC/12.5: DK/MFC/15
- 934 DK/MFC/25; DK/MFC/30; DK/MFC/37,5

#### Nida Dach inclined roof encasements

- 946 WP/CD60/12.5: WP/CD60/15
- 948 WP/CD60/25: WP/CD60/30
- 950 WP/CD60/37,5
- 952 ES/CD60/12,5; ES/CD60/15
- 954 ES/CD60/25; ES/CD60/30; ES/CD60/37,5
- 956 EL/CD60/12,5; EL/CD60/15
- 958 EL/CD60/25; EL/CD60/30; EL/CD60/37,5
- 960 PK/12,5; PK/15
- 962 PK/25; PK/30; PK/37,5
- 964 LD/12,5; LD/15
- 966 LD/25; LD/30; LD/37,5
- 968 ES/DK/CD60/12,5; ES/DK/CD60/15
- 970 ES/DK/CD60/25; ES/DK/CD60/30; ES/DK/CD60/37,5
- 972 EL/DK/CD60/12,5; EL/DK/CD60/15
- 974 EL/DK/CD60/25; EL/DK/CD60/30; EL/DK/CD60/37,5
- 976 DK/MFC/12.5: DK/MFC/15
- 978 DK/MFC/25; DK/MFC/30; DK/MFC/37,5

#### Nida Szacht encasements for vertical shafts

994 62,5A50; 65A50 996 75A50; 77,5A50; 80A50 998 87,5A50; 95A50 1000 100A50; 105A50; 110A50 1002 87,5A75; 90A75 1004 100A75; 102,5A75; 105A75 **1006** 112,5A75; 120A75 1008 125A75; 130A75; 135A75 **1010** 112,5A100; 115A100 1012 125A100; 127,5A100; 130A100 1014 137,5A100; 145A100 **1016** 150A100; 155A100; 160A100 1018 80AA50; 105AA75; 130AA100 1020 87,5AA50; 112,5AA75; 137,5AA100 1022 87.50075: 1000075 1024 112,5UU100; 125UU100 1026 1000075; 1050075 1028 12500100; 13000100 1030 62,5A/UAR50; 65A/UAR50 1032 75A/UAR50; 77,5A/UAR50; 80A/UAR50 1034 87,5A/UAR50; 95A/UAR50 1036 100A/UAR50; 105A/UAR50; 110A/UAR50 1038 87,5A/UAR75; 90A/UAR75 1040 100A/UAR75; 102,5A/UAR75; 105A/UAR75 1042 112,5A/UAR75; 120A/UAR75 1044 125A/UAR75; 130A/UAR75; 135A/UAR75 1046 112,5A/UAR100; 115A/UAR100 1048 125A/UAR100; 127,5A/UAR100; 130A/UAR100 1050 137.5A/UAR100: 145A/UAR100 1052 150A/UAR100: 155A/UAR100: 160A/UAR100 1054 62,5AA/UAR50; 65AA/UAR50 1056 75AA/UAR50; 77,5AA/UAR50; 80AA/UAR50 1058 87,5AA/UAR50; 95AAUAR50 1060 100AA/UAR50; 105AA/UAR50; 110AA/UAR50 1062 87,5AA/UAR75; 90AA/UAR75 1064 100AA/UAR75; 102,5AA/UAR75; 105AA/UAR75 1066 112,5AA/UAR75; 120AA/UAR75 1068 125AA/UAR75; 130AA/UAR75; 135AA/UAR75 1070 112,5AA/UAR100; 115AA/UAR100 1072 125AA/UAR100; 127,5AA/UAR100; 130AA/UAR100 1074 137,5AA/UAR100; 145AA/UAR100 1076 150AA/UAR100; 155AA/UAR100; 160AA/UAR100 1080 25; 27,5; 30 1082 37.5: 45 1084 50: 55. 60

### Nida Strop fire protection for timber floors

1096 G18/DPB1; G19/DPA2; G20/DPB1; G22/DPA2

- 1098 G18/DPB1/C; G19/DPA2/C
- 1100 G22/DPB1; G18/DPB1; G22/DPA2; G19/DPA2; G40/DPB1; G24/DPB1; G38/DPA2
- **1102** G18/DPB1/C; G19/DPA2/C; G22/DPB1/C; G22/DPA2/C; **1104** G18/DPB1; G32/DPB1; G36/DPB1; G64/DPB1; G19/DPA2;
- G25/DPA2; G32/DPA2; G56/DPA2 1106 G24/DPB1/C; G22/DPA2/C; G20/DPB1/C; G19/DPA2/C;
- G40/DPB1/C; G32/DPB1/C; G36/DPA2/C; G28/DPA2/C 1108 G36/DPB1; G40/DPB1; G56/DPB1; G64/DPB1; G80/DPB1;
- 1108 G36/DPB1; G40/DPB1; G56/DPB1; G64/DPB1; G80/DP G32/DPA2; G38/DPA2; G44/DPA2; G48/DPA2

- 1110 G40/DPB1/C; G44/DPB1/C; G64/DPB1/C; G38/DPA2/C; G40/DPA2/C; G56/DPA2/C
- 1112 D12,5/OGIEŃ+; D15/OGIEŃ+; D18/OGIEŃ+; D25/OGIEŃ+; D25/KOMPAKT
- 1114 D25/OGIEŃ+; D25/KOMPAKT; D30/OGIEŃ+
- 1116 D30/OGIEŃ+; D37,5/OGIEŃ+; D37,5/OGIEŃ+KOMPAKT; D40/KOMPAKT; D50/OGIEŃ+; D50/KOMPAKT
- 1118 D37,5/OGIEŃ+; D37,5/OGIEŃ+KOMPAKT; D50/OGIEŃ+; D50/KOMPAKT; D60/OGIEŃ+; D60/KOMPAKT
- 1120 G18/DPB1-D15/OGIEŃ+; G19/DPA2-D15/OGIEŃ+; G20/DPB1-D25/OGIEŃ+; G20/DPB1-D25/KOMPAKT; G22/ DPA2-D25/OGIEŃ+; G22/DPA2-D25/KOMPAKT; G18/DPB1-D18/OGIEŃ+; G19/DPA2-D18/OGIEŃ+
- 1122 G18/DPB1/C-D25/OGIEŃ+; G18/DPB1/C-D25/KOMPAKT; G19/DPA2/C-D25/OGIEŃ+; G19/DPA2/C-D25/KOMPAKT
- 1124 G22/DPB1-D25/OGIEŃ+; G22/DPB1-D25/KOMPAKT; G18/DPB1-D25/OGIEŃ+; G18/DPB1-D25/KOMPAKT; G22/DPA2-D25/OGIEŃ+; G22/DPA2-D25/KOMPAKT; G19/DPA2-D25/OGIEŃ+; G19/DPA2-D25/KOMPAKT; G28/DPB1-D30/OGIEŃ+; G24/DPB1-D30/OGIEŃ+; G25/DPA2-D30/OGIEŃ+; G22/DPA2-D30/OGIEŃ+
- 1126 G18/DPB1/C-D30/OGIEŃ+; G19/DPA2/C-D30/OGIEŃ+; G22/DPB1/C-D30/OGIEŃ+; G22/DPA2/C-D30/OGIEŃ+
- 1128 G32/DPB1-D37,5/OGIEŃ+; G28/DPB1-D37,5/OGIEŃ+; G28/ DPA2-D37,5/OGIEŃ+; G25/DPA2-D37,5/OGIEŃ+; G40/ DPB1-D50/OGIEŃ+; G36/DPB1-D40/KOMPAKT; G38/DPA2-D50/OGIEŃ+; G32/DPA2-D40/KOMPAKT
- 1130 G24/DPB1/C-D37,5/OGIEŃ+; G22/DPA2/C-D37,5/OGIEŃ+; G20/DPB1/C-D30/OGIEŃ+; G19/DPA2/C-D30/OGIEŃ+; G40/DPB1/C-D50/OGIEŃ+; G32/DPB1/C-D40/KOMPAKT; G36/DPA2/C-D50/OGIEŃ+; G28/DPA2/C-D40/KOMPAKT
- 1132 G48/DPB1-D50/OGIEŃ+; G40/DPB1-D50/OGIEŃ+; G40/DPA2-D50/OGIEŃ+; G38/DPA2-D50/OGIEŃ+; G36/ DPB1-D37,5/OGIEŃ+; G32/DPA2-D37,5/OGIEŃ+; G64/DPB1-D50/OGIEŃ+; G56/DPB1-D37,5/OGIEŃ+; G48/DPA2-D50/OGIEŃ+
- 1134 G44/DPB1/C-D50/OGIEŃ+; G38/DPA2/C-D50/OGIEŃ+; G40/DPB1/C-D50/OGIEŃ+; G32/DPA2/C-D50/OGIEŃ+; G56/DPB1/C-D60/OGIEŃ+; G44/DPB1/C-D50/OGIEŃ+; G48/DPA2/C-D60/OGIEŃ+; G40/DPA2/C-D50/OGIEŃ+

#### Dry screed

#### new

1168 LWA/25 1170 S/25 1172 MW/25 1174 PUF/25 1176 LWA/25 1178 S/25 1180 MW/25

### Nida Stal encasements for steel loadbearing structures

- 1192 4/KM-CD60/12,5; 4/KM-CD60/15; 4/CB-MF/12,5; 4/CB-MF/15;
- **1194** 4/C50-U50/12,5; 4/C50-U50/15
- 1196 4/KM-CD60/12,5; 4/KM-CD60/15; 4/CB-MF/12,5; 4/CB-MF/15
- 1198 4/KM-CD60/25; 4/KM-CD60/27,5; 4/KM-CD60/30; 4/KM-CD60/37,5; 4/KM-CD60/40; 4/KM-CD60/42,5;

4/CB-MF/25; 4/CB-MF/27,5; 4/CB-MF/30; 4/CB-MF/37,5; 4/CB-MF/40; 4/CB-MF/42,5

- **1200** 4/C50-U50/25; 4/C50-U50/27,5; 4/C50-U50/30; 4/C50-U50/37,5; 4/C50-U50/40; 4/C50-U50/42,5
- 1202 4/KM-CD60/25; 4/KM-CD60/27,5; 4/KM-CD60/30; 4/KM-CD60/37,5; 4/KM-CD60/40; 4/KM-CD60/42,5; 4/CB-MF/25; 4/CB-MF/27,5; 4/CB-MF/30; 4/CB-MF/37,5; 4/CB-MF/40; 4/CB-MF/42,5
- 1204 3/KM-CD60/12,5; 3/KM-CD60/15; 3/CB-MF/12,5; 3/CB-MF/15
- 1206 3/KM-CD60/12,5; 3/KM-CD60/15; 3/CB-MF/12,5; 3/CB-MF/15
- 1208 3/KM-CD60/25; 3/KM-CD60/27,5; 3/KM-CD60/30; 3/KM-CD60/37,5; 3/KM-CD60/40; 3/KM-CD60/42,5; 3/CB-MF/25; 3/CB-MF/27,5; 3/CB-MF/30; 3/CB-MF/37,5; 3/CB-MF/40; 3/CB-MF/42,5
- 1210 3/KM-CD60/25; 3/KM-CD60/27,5; 3/KM-CD60/30; 3/KM-CD60/37,5; 3/KM-CD60/40; 3/KM-CD60/42,5; 3/CB-MF/25; 3/CB-MF/27,5; 3/CB-MF/30; 3/CB-MF/37,5; 3/CB-MF/40; 3/CB-MF/42,5

#### Smoke barriers

 1240
 75/C50/12,5

 1242
 100/C50/25

 1244
 75/C50UAR50/12,5

 1246
 100/C50UAR50/25

 1248
 75/UAR50/12,5

 1250
 100/UAR50/25

## Nida Drewno encasements for timber load-bearing structures

1256 SDK/12,5; SDK/15; SDB/12,5; SDB/15 1258 SDK/25; SDB/25 1260 BDB/12,5; BDB/15 1262 BDB/25

# Nida Drewno fire protective encasements for timber load-bearing structures

1268 FBDB/15; FBDB/30; FBDB/50 1270 FBDB/18; FBDB/30; FBDB/50 1272 FBDB/15; FBDB/25; FBDB/50 1274 FBDB/15; FBDB/30; FBDB/50 1276 FSDB/18; FSDB/30.5; FSDB/30; FSDB/50 1278 FSDB/15; FSDB/25; FSDB/27,5; FSDB/50 1280 FKDB/15; FKDB/25; FKDB/27,5; FKDB/50

#### Contact







# SINIAT – THE LEADING PROVIDER OF GYPSUM-BASED SOLUTIONS FOR THE CONSTRUCTION INDUSTRY



3.300 employees



Siniat originated from the Lafarge Group which sold the

shares of the gypsum department to the Etex Group in



36 countries



35 production plants



annual revenue 800 mln euro 2011. Siniat has an individual legal identity within the Etex Group, with the headquarters in Belgium. The Nida System combines the highest standards of design, innovation, manufacturing, quality control, and

design, innovation, manufacturing, quality control, and technical support. All the elements of the Nida system are manufactured in a manner which ensures meeting the requirements of the Polish and European standards, as well as the highest requirements set by the customers.

This technical catalogue of the Nida drywall partition systems shall provide you with the full range of the technical information necessary for proper design and construction of various gypsum plasterboard structures.



THE STRENGTH OF SINIAT IS ITS TRADITION DATING 160 YEARS BACK, AND ITS WIDE RANGE OF EXPERIENCE WITH RESPECT TO MANUFACTURING OF CONSTRUCTION MATERIALS, AS WELL AS INNOVATION AND APPLICATION OF MODERN ENVIRONMENTALLY-FRIENDLY TECHNOLOGIES.

Our company employs 250 individuals at three locations in Poland: the production plants in Gacki / Leszcze and Konin, and the headquarters in Warsaw.











Nida syst www.sys

Leszcze



# gypsum plasterboards **Nida**

The Nida plasterboards are manufactured acc. to standard PN-EN520+A1. They belong to the group of the non-combustible construction materials and can be utilised for providing passive fire protection. The core of the plasterboards contains about 20% of crystal bound water. A 12.5 mm thick board contains about 2 litres of water per each square metre. Additionally, the fire protection boards are provided with glass-fibre reinforced cores, which increases their fire resistance characteristics.

# Characteristics of gypsum plasterboards

## Non-combustible material

All the plasterboards provided by Siniat, both their standard versions, as well as those of enhanced fire resistance parameters, are classified as non-combustible materials.

## Thermal insulation

The plasterboards have good thermal insulation characteristics:  $\lambda=$  0.20 W/mK.

## Stability and durability

The Nida plasterboards meet the requirements defined by standard PN-EN520+A1:2012. They consist of gypsum cores with surfaces and lengthwise edges covered with special cardboard sheathing. The cardboard sheathing acts as reinforcement and provides the boards with flexibility and smooth surfaces.

## Simple processing

Processing of the plasterboards is very simple. It is achieved with utilisation of standard tools (knife for plasterboards, compass saw, rasp, steel trowel, putty knife, and drill-driver). The carefully designed board filling systems enable constructing smooth walls, suspended ceilings and attic partitioning surfaces.

# They constitute perfect substrate for further finishing works

The Nida plasterboards do not deform and constitute perfect substrates for further finishing works - painting, wall-papering, tiling, decorative plastering, e.g. stucco.

## Range of applications

The gypsum plasterboards are products which can be utilised exclusively in closed areas, in building interiors. The ambient temperature in the rooms where the boards are installed should not exceed the boundaries from 5°C to 40°C. The following important parameter is air humidity. The type A (Nida Expert),

F (Nida Ogień Type F) and DF (Nida Ogień Plus) boards can be utilised in rooms with the relative air humidity up to 70%. Additionally, the H2 (Nida Woda) and DF H2 (Nida Woda Ogień Plus) boards are accepted for utilisation in rooms with the relative humidity temporarily Increased to 85% (up to 10 hours). Siniat also offers innovative boards, i.e. Nida Hydro, which can be utilised both in wet environments, and outside.

# according to European Standard The new European Standard for

plasterboards, namely PN-EN520, replaced the previous Polish Standard no. PN-B-79405.

Marking of plasterboards

The new markings for plasterboards are presented in the table on the right.

Trade name of plasterboards	Standard number
Nida Expert	A
Nida Woda	H2
Nida Ogień typ F	F
Nida Ogień Plus	DF / DFR
Nida Ogień Kompakt	DF
Nida Woda Ogień Plus	DFH2 / DFH2R
Nida Flam Plus	DFR
Resistex	DFH2IR
Nida Cicha	A
Nida Cicha	DFH1IR
Nida Twarda	DEFH1IR
Nida Hydro	GMFH1I
Nida Gięta	А
Nida RTG	DF











Trade name	Applications	Special features
nıda Expert	For construction of partition walls, wall and ceiling parti- tioning on load-bearing structures, and as dry lining. For applications in the areas with the relative air humidity up to 70%.	The only Type A plasterboard available on the market which has been tested with respect to application for all the Nida system solutions. Compliance assessment system No. 3.
nıda Woda	It is accepted for utilisation in the areas of temporarily (up to 10 hours) increased air humidity up to 85%.	Reduced water absorption - water absorption below 10%.
nıda Ogień Typ F	For utilisation in the areas with increased fire protection requirements. For applications in the areas with the relative air humidity up to 70%.	Fire resistant.
nıda Ogień Plus	For utilisation in the areas with increased fire protection requirements. For applications in the areas with the re- lative air humidity up to 70%. For applications where the Nida Ogień board type does not meet the fire resistance requirements.	Increased fire resistance in comparison to the Nida Ogień Type F board.
NIda Ogień Kompakt	For applications in the areas with increased fire protec- tion and acoustic insulation requirements.	Improves rigidity of structures.
nıda Woda Ogień Plus	It is accepted for utilisation in the areas with temporarily (up to 10 hours) increased relative air humidity – up to 85%, with additional requirements concerning fire protection.	Increased fire resistance and acoustic insulation.
∩ıda Flam Plus	For protection of steel load-bearing structures against fire. For applications in the areas with the relative air humidity up to 70%.	Increased mechanical characteristics and resistance to impact of high temperatures generated during fires.
<b>Resis</b> tex	For construction of smoke barriers and anti-burglar walls. It is accepted for utilisation in the areas with temporarily (up to 10 hours)	Increased hardness of surface and resistance to longitudinal and crosswise breaking loads.

Length	Width	Thickness	Weight	Reaction to fire	Edge type	Fixing method	Board marking
2,0 m 2,6 m 3,0 m *	1,2 m	9,5 mm 12,5 mm	6,7 kg/m² – gr. 9,5 mm 8,0 kg/m² – gr. 12,5 mm	A2 - s1.d0	Tapered (KS)	With sheet metal screws to system metal structu- re, or with gypsum-based adhesive to surface.	PN-EN520+A1 Typ A
1,2 m 2,0 m 2,6 m 3,0 m *	0,6 m 1,2 m	12,5 mm	7,75 kg/m² 8,0 kg/m²	A2 - s1.d0	Tapered (KS)	With sheet metal screws to system metal structure.	PN-EN520+A1 Typ H2
2,0 m 2,6 m 3,0 m *	1,2 m	12,5 mm	8,6 kg/m²	A2 - s1.d0	Tapered (KS)	With sheet metal screws to system metal structure.	PN-EN520+A1 Typ F
2,0 m 2,6 m 3,0 m *	1,2 m	12,5 mm 15,0 mm 18,0 mm	10,3 kg/m² - gr.12,5 mm 13,5 kg/m² - gr. 15 mm 14,7 kg/m² - gr. 18 mm	A2 - s1.d0	Tapered (KS)	With sheet metal screws to system metal structure.	PN-EN520+A1 Type DF (12,5 mm) Type DFR (15,0 mm) 18,0 mm)
2,0 m 2,5 m	0,625 m	20,0 mm 25,0 mm	16,7 kg/m² – gr. 20 mm 20,8 kg/m² – gr. 25 mm	A2 - s1.d0	Tapered (KS)	With sheet metal screws to system metal structure.	PN-EN520+A1 Type DF
2,0 m 2,6 m 3,0 m	1,2 m	12,5 mm 15,0 mm	10,3 kg/m² – gr. 12,5 mm 13,5 kg/m² – gr. 15,0 mm	A2 - s1.d0	Tapered (KS)	With sheet metal screws to system metal structure.	PN-EN520+A1 Type DFH2 (12,5 mm) Type DFH2R (15,0 mm)
2,6 m	1,2 m	12,5 mm 15,0 mm	11,2 kg/m² - gr.12,5 mm 13,3 kg/m² - gr. 15 mm	A2 - s1,d0	Tapered (KS)	With sheet metal screws to system metal structure.	PN-EN520+A1 Typ DFR
2,0 m	1,2 m	12,5 mm	11,2 kg/m²	A2 - s1,d0	Semi-circular Tapered (KPOS)	With sheet metal screws to system metal structure.	PN-EN520+A1 Type DFH2IR

\*We are able to provide plasterboards of any length for an extra charge.

















Trade name	Applications	Special features
nıda Cicha Typ A	For constructing drywall partition systems at places where increased acoustic insulation is required.	The innovative composition of the gypsum core enables achievement of high acoustic insulation parameters.
nıda Cicha	For applications in areas subject to increased risk of mechanical damage (schools, kindergartens, sports facilities, civic buildings, production plants, etc.) For construction of the Nida drywall partition systems with very high acoustic insulation parameters.	Increased hardness of surface and resistance to longitudinal and crosswise breaking loads. The board type additionally combines the characteristics of fire protection and water resistant boards. The innovative composition of the gypsum core enables achieve- ment of high acoustic insulation parameters.
nıda Twarda	For applications in areas subject to increased risk of mechanical damage (schools, kindergartens, sports facilities, civic buildings, production plants, etc.)	Increased hardness of surface and resistance to longitudinal and crosswise breaking loads. The board type additionally combines the characteristics of fire protection and water resistant boards.
nıda Hydro	For utilisation in areas which remain wet and humid for long periods of time. Can be utilised outside.	Resistant to water and moisture, resistant to moulding, increased impact resistance. The external layer madeof a material based on glass fibre, orange colouring of the layer.
nıda Gięta	Intended for construction of curved ceilings and walls.	Highly flexible, Ease of composing any interior designs (curved structures), minimal bending radius 300 mm.
nıda RTG	For applications in rooms with presence of X-rays.	Plasterboards with lead layers applied on the back side of the boards. The board type intended for pro- tecting rooms against penetration of X-rays.

Width Thickness Weight Length 2,0 m 2,6 m 1,2 m 12,5 mm 12,8 kg/m<sup>2</sup> 2,0 m 2,6 m 1,2 m 12,5 mm 12,8 kg/m<sup>2</sup> 12,8 kg/m² - gr. 12,5 mm 15,4 kg/m² 12,5 mm 2,0 m 1,2 m 15,0 mm – gr. 15,0 mm 10,8 kg/m² 12,5 mm 15,0 mm – gr. 12,5 mm 13,5 kg/m² 2,4 m 2,6 m 1,2 m – gr. 15,0 mm 1,2 m 6,5 mm 5,6 kg/m² 2,6 m 12,5 mm + 0,5 mm (lead layer) 15,9 kg/m<sup>2</sup> 12,5 mm + 1,0 mm (lead layer) 21,6 kg/m<sup>2</sup> 12,5 mm + 1,5 mm (lead layer) 27,3 kg/m<sup>2</sup> 2,0 m 0,625 m 12,5 mm + 2,0 mm (lead layer) 33,0 kg/m<sup>2</sup> 38,7 kg/m<sup>2</sup> 44,4 kg/m<sup>2</sup> 12,5 mm + 2,5 mm (lead layer) 12,5 mm + 3,0 mm (lead layer)

 $\ensuremath{^*}\ensuremath{\mathsf{We}}$  are able to provide plasterboards of any length for an extra charge.

# Siniat cement boards

Cementex	For utilisation in areas which remain wet and humid for long periods of time, and outside buildings, for such applications as stud walls, ceilings, façades, balconies, carports.	The cement board type is resistant to water and moisture, resistant to moulding, increased impact resistance.
Duripanel	For timber frame and modular constructions as load-be- aring walls as external lining, timber floors, flooring, attic partitioning, as well as sound absorbing screens. Can be utilised outside.	The cement-particle board type provides a higher level of interior aesthetics, passive fire protection, and efficient acoustic insulation.

2,4 m	1,20 m	3,5 mm 6,0 mm 8,0 mm 10,0 mm 12,0 mm	5,8 kg/m <sup>2</sup> 8,3 kg/m <sup>2</sup> 11,1 kg/m <sup>2</sup> 13,9 kg/m <sup>2</sup> 16,7 kg/m <sup>2</sup>	A1 A2 - s1,d0	KP KS	With utilisation of Cementex sheet metal screws to system metal structure.	Wg EN12467+A1
2,6 m 3,1 m	1,25 m	from 8,0 mm to 40,0 mm	Depending on board thickness: od 10,0 kg/m <sup>2</sup> do 50,0 kg/m <sup>2</sup>	A2 - s1,d0 B - s1,d0	KP	With utilisation of Cementex sheet metal screws to system metal structure.	Wg EN13986 oraz EN634-2













Reaction to fire	Edge type	Fixing method	Board marking
A2 - s1.d0	Tapered (KS)	With Nida Twarda sheet metal screws to system metal structure.	Wg PN-EN520+A1 Typ A
A2 - s1.d0	Tapered (KS)	With Nida Twarda sheet metal screws to system metal structure,	Wg PN-EN520+A1 Typ DFH1IR
A2 - s1.d0	Tapered (KS) Straight (KP)	With Nida Twarda sheet metal screws to system metal structure.	Wg PN-EN520+A1 Typ DEFH1IR
A2 - s1.d0	Tapered (KS)	With Nida Hydro C5 sheet metal screws to system metal structure.	Wg EN 15283-1 Typ GMFH11
A2 - s1.d0	Tapered (KS)	With sheet metal screws to system metal structure.	Wg PN-EN520+A1 Typ A
A2 - s1.d0	Semi-circular (KPO)	With Nida Twarda sheet metal screws to system metal structure.	Wg PN-EN520+A1 Typ DF







# metal profiles and fixing elements

The metal profiles are produced acc. to standard PN-EN14195.

All the Nida system profiles are made of cold-rolled metal sheets, thickness 0.55 mm. The profiles for construction of encasements of partition walls, suspended ceilings, attics, and load-bearing structures of building and service risers are manufactured at the Siniat production plant in Gacki.

The steel sections co-operate with appropriate metal accessories, composing structures for installation of the Nida plasterboards.

The metal accessories meet the requirements of the standard number PN-EN13964, and this fact is confirmed by the results of the carried out tests.

# Nida gypsum products

The plasterboards for the Nida drywall partition systems are manufactured at the Dry Gypsum-Based Mix Production Plant in Konin. Siniat offers the following gypsum compounds for jointing the following gypsum plasterboards: Nida Start, Nida Duo, Nida Finish, Nida Max, which meet the requirements of standard PN-EN13963, and high quality thin-layer gypsum-based

Nida Perfect, Nida Eco and Nida Optima finishing compounds, which meet the requirements of standard PN-EN13279-1. The new addition to the Siniat range of products is the specialised Nida Fire (A1) fire-protective gypsum putty, which is utilised for construction of passive fire protection systems.

Siniat also offers ready-to-use dolomite-based joint fillers and finishing compounds. The Nida Fix adhesive manufactured according to standard PN-EN14496 is utilised for direct installation of the described plasterboards. Utilisation of the Siniat gypsum products guarantees the highest standard of the performed finishing works.



Promat

# Nida gypsum-based plasters

The Supra L light machine-applied gypsum-based plaster is a highly advanced plastering compound based on synthetic gypsum with addition of specialised lightweight aggregates and modern modifying components. It is characterised by its increased efficiency, ease of processing, very good adhesion and mechanical strength. This product can be widely utilised in residential buildings, public utility buildings, hotels, healthcare institutions, and other buildings, even with increased relative humidity, not exceeding 70%. It is perfect for application on concrete, ceramic, silicate, and aerated concrete substrates.

The main advantages of the gypsum-based plaster for mechanical application are: mechanisation of the plastering work, high efficiency, perfectly straight and smooth surface, good thermal and acoustic insulation. The spaces where the Nida Supra L gypsum-based plaster is applied receive specific human-friendly micro climate.

# primer formulations

The Nida Supra G and Nida Supra W primer formulations complement the above gypsum-based plasters. The first of them is intended for priming absorptive and very absorptive substrates, such as aerated concrete, or gypsum substrates. This formulation can also be applied in order to strengthen the substrate with view to application of the gypsum-based finishing compounds belonging to the Nida family, e.g.: Nida Perfect. Concrete substrates with low absorption should be primed with utilisation of the Nida Supra W formulation, which, as its basic function, increases adherence of the substrate. This effect is achieved owing to the content of synthetic quartz sand in the resin, which increases coarseness of the surface. Both the formulations were provided with intense colouring for easy identification: Nida Supra G - yellow, Nida Supra W - pink.



















# drywall **partition systems**

# nıda Tynk



 Anchored wall cladding

The plasterboards can be utilised as sheathing material for internal and external walls. They are especially applicable in the case of fast and clean renovations. The surface of dry plaster is smooth and constitutes perfect substrate for further finishing works. The Nida Expert plasterboards, thickness 12.5 mm, can be fixed to a substrate with utilisation of the Nida Fix adhesive, or to a steel structure with utilisation of steel sections.

When one, or a few layers of the Nida Ogień Plus (Type DF) boards, thickness 12,5 mm, or 15 mm, are fixed to a steel structure with additional insulation material, the load-bearing walls of the building can reach the EI120 fire resistance class. When such structures are constructed, the acoustic and thermal insulation of their external walls is increased.

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# nıda Ściana



The partition wall systems offered by Siniat were tested at the Building Research Institute in Warsaw. Basing on those examinations it can be determined that those wall systems can reach even the 120 min. ((R)EI120) fire resistance class. According to the requirements of this fire resistance class it is possible to construct partition walls up to 11 m of height. With utilisation of the special wall systems intended for cinemas it is possible to construct walls up to 20 m of height. The partition wall systems offered by Siniat can reach the acoustic

Partition walls



Independent wall cladding

The plasterboards can be utilised as sheathing material for internal and external walls. They are especially applicable in the case of fast and clean renovations. The surface of dry plaster is smooth and constitutes perfect substrate for further finishing works. The Nida plasterboards, thickness 12.5 mm, in independet wall cladding system are fixed to Nida C and Nida UAR steel structure.

When one, or a few layers of the Nida Ogień Plus (Type DF) boards, thickness 12.5 mm, or 15 mm, are fixed to a Nida independet steel structure, the load-bearing walls of the building can reach the El120 fire resistance class. When such structures with additional layer of insulation material are constructed, the acoustic and thermal insulation of their external walls is increased.

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The most popular application of plasterboards are partition wall systems. All the Nida plasterboard types can be utilised for their construction. Partition walls can separate rooms, act as fire resistant barriers, or provide acoustic and thermal insulation.

insulation parameters from 42 dB (walls with a single profile Nida C50 with sheathing of the Nida Expert boards 1x12,5 mm), up to 80 dB for the special partition wall systems.

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Apart from their standard functions, partition stud walls must meet a number of more specialised requirements, such as acoustic insulation, resistance to conditions of increased humidity, or exposure to high temperatures during fires. One of the new and increasingly important requirements is their resistance to burglary, according to standard EN 1627, with levels defined by the appropriate European regulations and those issued by the member states,

The resistance to burglary is defined as the resistance of a partition during an attempt at gaining access to a protected area with utilisation of proper tools and muscle strength. Such areas could be, e.g., the protected areas in banks, server rooms, as well as walls separating individual apartments for the multi-family buildings, or terraced houses.

Such Siniat partitions are constructed basing on the specialised boards, such as e.g. Resistex, whose characteristics enable reaching the RC3 level of anti-burglary resistance without utilisation of sheathing of steel sheets.

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# nıda Sufit



Suspended ceilings and ceiling sheathing The second most popular application of plasterboards after their application for constructing walls are suspended ceilings. They can act as, e.g., aesthetic masking of various installations running under the ceiling, or structural floor elements. They can also act as fire resistant barriers, or provide acoustic and thermal insulation separating adjacent rooms,

The frames of suspended ceilings are most often sheathed with the Nida Expert 12.5 mm, or Nida Ogień Plus 12.5 mm, or 15 mm boards. In the case of the special sound absorption ceilings the Nida Sonic plasterboards are utilised. The suspended ceiling structures are most often constructed of the cold-bent Nida CD60 steel profiles, assembled in the single-, or double-level cross-arrangement. The suspension of the suspended ceilings consists of the rotary hangers with springs and fixing rods, and for the ceilings acting as fire barriers - the nonius hangers, or the ES, EL direct fixing elements.

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Self-supporting ceilings (without hangers)

This system of self-supporting ceilings is an innovative solution based on structures constructed of Nida C wall profiles and Nida UAR profiles, which do not require utilisation of any intermediate suspedning elements. In any situations where the space under floors is occupied by many installations, or a specific structure of such spaces renders anchoring impossible, this innovative self-supporting ceiling system constructed according to the Nida Sufit technology is utilised. Apart from their aesthetic function as covering of the floor structure, those self-supporting ceilings can act as acoustic, and fire barriers when specialised Nida Ogień Plus, Nida Twarda, or Nida Cicha boards are applied. If such partitioning is supposed to be installed in wet and moits areas, it is always required to utlise Nida Hydro boards. The system is fairly commonly used as contractors noticed its simple installation feature. All the Nida self-supporting (hangerless) ceilings' solutions have been thoroughly examined by the Building Research Institute, which means that they are very safe to use.

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# nida Poddasze



Loft encasements

# nıda Dach



Inclined roof encasements









The Nida plasterboards are perfect materials for easy construction of attic partitioning. They provide aesthetic means of masking the roof truss structure and the insulation material of mineral wool hidden underneath in residential buildings and public venues. But the most important function of such partitioning is providing fire protection to the roof truss structure and roof covering. In our country the indisputable regulations in this respect are presented in the Technical Conditions which should be met by buildings and their localisation § 219 paragraph 2 which enforce installation of a fire protection system in the case of any attic providing space for utility purposes (apartments, offices, etc.) The protective structure was constructed as a fire barrier separating the combustible structure and the combustible roof sheathing in buildings (residential class EI30, public venues class EI60).

Siniat was the first company on the Polish market which carried out tests and developed the Nida Poddasza system which meets the requirements of the applicable national regulations.

#### Page 892

Nida plasterboards are a perfect solution for constructing drywall structures under pitched roofs, which can serve as fire protection elements. Such roofs belong to the key load-bearing elements of buildings, which, owing to the the characteristics of the material they are constructed of, which is timber, are susceptible to combustion and spread of fire. Apart from protection against fire, utilisation of finishing materials such as Nida plasterboards provides aesthetic covering of the wooden structure of a pitched roof, and enables installation of insulation material in the spaces between rafters. If there are any protection requirements concerning pitched roofs for commercial buildings, it is necessary to utilise Nida Ogień Plus type DF fire protection boards, which, owing to their specialised structure and composition, provide fire protection up to class REI60. Such encasements require application of all the system components, such as the system steel frame, installation accessories, and joint fillers.

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# nida Szacht



Encasements for vertical shafts

The service riser encasement systems are utilised mainly to mask those risers which can be found in any building, regardless of their function and purpose. Owing to the possibility of transfer of smoke, or fire from a floor which is on fire to other floors of a building, the service risers which usually pass through all the floors of a building must be properly protected. For this purpose, the systems based on the Nida Ogień Plus (Type DF), or Nida Woda Ogień Plus (Type DFH2), of thickness 12.5 mm, 15 mm, 20 mm, or 25 mm, which are fixed to intermediate load-bearing structures constructed of the Nida C metal profiles, or directly to the walls and floors of a room, without a load-bearing structure, are provided.

The encasement systems for service risers constructed with utilisation of the Nida plasterboards provide protection against spread of fire up to the El 120 fire resistance class. The provided acoustic protection against the noises coming from the inside of the risers resulting from e.g. air flow, sewage system, or vibrations of the installation, can be treated as an additional function.

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# nida Podłoga new





# nida Strop D



Fire protection for timber floors

The Nida Strop D fire protection system for timber floors provides protection for all the timber structure floors depending on the requirements with respect to the direction of fire exposure (from the top, from the bottom, or from both the sides) according to the fire resistance class REI30 ÷ REI120. The upper fire protection was based on the innovative DURIPANEL B1 (reaction to fire class B) and DURIPANEL A2 (reaction to fire class A2) cement-particle boards, which can function as load-bearing floor filling. Protection from the bottom is provided with utilisation of the standard ceiling partitioning systems, which are not complicated, common and based on the standard Nida Ogień Plus type DF plasterboards.

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The Nida Podłoga dry screed system consists of the specially modified Nida Twarda KP gypsum-particle floor boards with fibres and is an alternative to the conventional solutions (standard screed). The dry screed is applicable for all floors, both new, and those that need to be renovated. Its low weight and quick and dry assembly make the system a perfect solution for the problem of renovation of old and damaged flooring, especially on weakened floors. Apart from the advantages mentioned above, the dry screed applied according to the Siniat technology has the REI60 fire resistance performance class for fire exposure from above, still meeting those requirements requires application of two layers of the Nida Twarda KP plaster-particle boards with fibres, thickness 12.5 mm.

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The encasement systems for columns and beams are most commonly utilised in order to mask the load-bearing structure of a building. Those systems have two functions: the decorative, which is masking the structural elements, which not always look nice, and the fire-protective - protecting those elements against fire for a defined period of time. The systems of structural elements utilising the Nida Flam Plus (Type DFR), thickness 12.5 mm, or 15 mm, enable providing protection to the steel load-bearing structures, depending on the applied system, up to the fire resistance class R180.

Utilisation of other types of plasterboards is acceptable, but its limited to construction of such structures without any fire protection requirements (aesthetic function).

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# nida Drewno



The encasement system for timber columns is usually utilised in order to provide them with aesthetic masking. In order to construct such encasement it is possible to apply the system solution based on the Nida CD60 load-bearing structure with utilisation of the Nida KM fixing clips. The other simpler solution, which on the other hand is more prone to transferring loads originating from the timber structure, is direct encasement (the boards are fixed directly with utilisation of the Nida wood screws). Specialists recommend application of the specialised Nida Twarda (DEFH1IR) boards for timber structures, as they possess the characteristics ensuring additional rigidity. Apart from that, those boards are resistant to moisture and mechanical damage of surfaces.

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## Encasements for timber load-bearing structures



Fire protective encasements for timber load-bearing structures

The fire protection encasement system for timber load-bearing structures was developed in order to increase safety of the objects raised fully, or partly, according to the timber frame technology. Apart from the fire protection function, the solutions based on the Nida type DF boards serve the aesthetic function as well. This system was based on direct installation of the specialised Nida Ogień Plus type DF and Nida Ogień Kompakt type DF boards to the timber structure.

Application of the innovative fire protective Nida Fire (A1) gypsum putty is required for finishing of the joints between the boards and full finish of the surface. Owing to application of the aforementioned specialised products manufactured by Siniat, such fire protective encasements meet the requirements of the highest R30-R120 fire resistance classes.

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# nida Kurtyna



Smoke barriers

The Siniat smoke barriers are provided in order to prevent free spread of smoke and gases generated by a fire in large rooms, such as production halls, warehouses, atria, or shopping centres.

By dividing a bigger area into subzones, the barriers provide control over spread of smoke and heat, owing to which it is possible to separate the individual areas where smoke is supposed to gather from those which should remain free from smoke, which makes evacuation possible. The barriers manufactured by Siniat are made of the specialised Resistex boards, which enable constructing suspended partitions meeting the criteria of the DH60 to DH150 classes in the conditions of a standard fire.

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In some buildings the smoke and heat extraction system is ineffective when not accompanied by smoke barriers, this is why the specialists of Siniat have developed the highest class of systems protecting health and life of people who currently are staying in buildings during occurrences of fire.

The smoke barriers developed by Siniat were constructed and tested according to standard PN-EN12101-1, and subsequently marked with the CE marking.





# acoustics in interior partitioning

Plasterboards are widely utilised for various types of interior structures. Owing to high diversification of the requirements in relation to the acoustic parameters that should be met by those structures, various board types and structural solutions are applied, as appropriate for those applications.

The range of products offered by Siniat includes a wide variety of plasterboards appropriate for the systems of high acoustic insulation, as well as the Nida Sonic perforated boards, which are applied for the sound absorbing systems. In both the cases, those materials, apart from their acoustic functions, serve the decorative function as interior finishing materials.

# Acoustic insulation (soundproofing)

Acoustic insulation between individual rooms, regardless of the building type and function, is one of the parameters defining the functional quality of each building. Acoustic insulation is the measurement determining how well the structural system (physical structure) protects/isolates an area against noise coming from other rooms, or surroundings. This value is presented in decibels (dB).

In Poland, meeting the acoustic insulation requirements defined for various building partitions is obligatory. Those requirements are regulated by the Polish norm PN-B-02151-3:2015-10 "Construction acoustics – Protection against noise in buildings – acoustic insulation of partitions in buildings and acoustic insulation of construction partitions – Requirements" which has been valid since 2001.

This standard presents the minimal acceptable parameter values for the acoustic insulation for walls and floors depending on the type and the intended use of various buildings, as well as the functions of the adjacent rooms.

The acoustic insulation value for partition walls is calculated with utilisation of the following formula: R'A1 = RA1 - K.

R'A1 – approximate acoustic insulation assessment index for a partition obtained in a building in the real-life conditions.

RA1 – specific acoustic insulation index for a partition observed in a laboratory

K – correction defining the influence of the flanking transmission of sound.

Depending on the structure of the specific partition walls, their filling with a soundproofing material, and the thickness, type and number of layers of the plasterboard, various acoustic insulation values for a partition can be observed.

In the Siniat systems, the acoustic insulation of the RA1 partition walls lies within the range up to 33 dB for a wall constructed on a single profile and provided with a single layer of plasterboard sheathing and over 75 dB for the special walls constructed in cinemas.

## Impact of partition wall structure on acoustic insulation of partition

Depending on their structure, the partition walls can be divided into single and double. In the case of the single walls, the individual elements of their frames are connected with the boards of the sheathing, thus forming noise-transferring arrangements. The shape and width of the profiles (50, 75, or 100 mm) also have great impact on the acoustic insulation. Depending on the profile width, various structural rigidity is obtained, and it is possible to fill the partition walls with insulation materials of various thickness.

In the case of the sheathing constructed of 12.5 mm thick plasterboards it is possible to obtain an increase of the acoustic insulation factor RA1 even up to 6 dB by increasing the profile width from 50 to 100 mm.

In the case of the double wall structures the sheathing of the plasterboards is fixed to two independent frames, there is no acoustic bridging and in comparison to the single structure walls, better acoustic insulation parameters are achieved.

When comparing the acoustic insulation performance for the Nida C 100 walls with a single frame and the double Nida 2xC50 walls of similar thickness, the RA1 index for the double wall is higher by 5 dB.

A higher acoustic insulation level is achieved for partitions only when their internal void is filled with a noise-absorbing material. For the walls without any filling the noise insulation indexes are almost the same for both the single and double frame structure walls.

# Impact of plasterboard sheathing on acoustic insulation of partitions

The thickness and number of sheathing layers have great impact on the acoustic insulation of walls. The thickness and type of the boards define the parameters of the resonance frequency at which a visible decrease of acoustic insulation takes place. When two layers of the sheathing constructed of 12.5 mm thick plasterboards are applied, in relation to single-layered sheathing, the RA1 acoustic insulation index rises within the range from 7 to 8 dB.

This solution is more beneficial from applying single 25 mm thick boards. By increasing the number of boards acting as wall sheathing and applying asymmetrical wall sheathing it is possible to improve (increase) the acoustic insulation parameter. The RA1 parameter is also increased when the Nida Ogień Plus plasterboards are applied instead of the Nida Expert, as the former have greater mass per 1m2 index with the same thickness.

## Impact of partition wall filling with insulation materials on their acoustic insulation

The presence of a noise absorbing material filling a wall has a key impact on its acoustic insulation. Lack of such insulation materials reduces the noise insulation capability of a single-structure partition wall by a couple of decibels, and in the case of a double-structure partition wall - by over ten decibels.











 Another important factor is the thickness of the insulation material applied in a wall, while the impact of its density and type (glass, or rock mineral wool) is of lesser importance.

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- Apart from the enumerated factors influencing the acoustic insulation of partitions, the decisive role here is played by:
- precision of the performed works, e.g. board filling,
- tightness of the joints around the wall perimeter,
- application of acoustic insulation tape under the profiles around the perimeter,
- tightness of the service penetrations,
- proper structures at the corner connections of internal partition walls,
- eradication of acoustic bridging at the electrical junction boxes,
- insulation of the service and ventilation ducts.

## Noise cancelling (noise absorption)

It is a measurement which determines how well a building absorbs sound/noise generated in the same room by preventing its rebound. This value is presented as % and is lies within the range from 0% to 100%.

The Nida Sonic boards are utilised for the noise absorbing systems. The Nida Sonic trade name includes a wide range of perforated plasterboards intended for construction of wall and suspended ceiling sheathing. Those boards consist of a gypsum core with cardboard glued around it,



just like in the case of the traditional plasterboards. The boards feature holes - perforations going through their whole thickness. Fleece is glued to the back side of the boards. A proper acoustic environment means co-operation between the phenomena of sound absorption and rebound. It is especially important in large rooms with high requirements with respect to the acoustic comfort: concert halls and auditoriums, lecture halls and classrooms. Proper jointing of Nida Sonic the boards with the sheathing materials available on the market, such us plasterboards, enables providing optimal sound propagation conditions in a room.

The sound absorption characteristics of the Nida Sonic boards correspond to the sound spectrum of human voice with respect to the frequency response.

It means that those boards perfectly cancel the noise generated by

human voice, at the same time reducing reverberation -sound rebound. The sound absorption level of the sheathing constructed with utilisation of the Nida Sonic boards is variable, depending on the board type (various w sound absorption coefficients), the sheathing suspension height, and the thickness of the applied mineral wool.



Lack of any insulation material reduces the acoustic insulation efficiency by a few decibels - in the case of the walls based on a single load-bearing structure with sheathing of a single layer of plasterboards, to over ten decibels - for the walls based on the double structure.













Suspension: 300 mm No mineral wool:, no fleece

Lack of acoustic fleece considerably decreases the sound absorption capacity.





# increased acoustic insulation it's your comfort nıda Cicha





Highly effective acoustic insulation

Partition walls

Wall sheathing Ceilings

Nida Expert Nida Ogień Plus



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**Resistex** 

# Nida Cicha

Provides exceptionally effective acoustic insulation

etex inspiring ways of living

# acoustic requirements according to **PN-B-02151-3:2015-10**

The national legislation devoted to designing and construction of building contains six basic functional requirements which should be met.

Apart from the vital aspects of the structural, and fire safety, and the hygiene and health conditions, each building, depending on its purpose, must meet the requirements regarding protection against noise and vibrations, as well. The precise requirements for the partition walls in the range of the acoustic insulation in the form of the R'A1 coefficient is introduced by the Polish Standard no. PN-B-02151-3:2015-10, for which the specialists of Siniat developed the "classification pyramid". It is a very clear classification of individual partitions classified depending on the values of the R'A1 acoustic insulation in relation to graphic visualisations of buildings of various types i.e. hospitals, hotels, schools, and kindergartens, including single-family houses as well.



## Primary and secondary schools

The minimal R'A1 acoustic insulation value for walls without doors separating type 1 and 2 rooms.

#### ACOUSTIC INSULATION REQUIREMENTS:

Room 1	Room 2	Acoustic insu- lation R'a1
	Classroom, staffroom	
	General passageway	≥48 dB
Classroom	Administration room	
	Dayroom	≥50 dB
	Sanitary areas, kitchen, canteen	
Staffroom	General passageway	≥48 dB
As above and administrative rooms	Rooms with sources of acoustic interference (PE, music lessons, workshops)	Individually, but min. ≥ 58 dB



## Office buildings

The minimal R'A1 acoustic insulation value for walls without doors separating type 1 and 2 rooms.

#### ACOUSTIC INSULATION REQUIREMENTS:



## Nurseries and kindergarten buildings

The minimal R'A1 acoustic insulation value for walls without doors separating type 1 and 2 rooms.

#### ACOUSTIC INSULATION REQUIREMENTS:

Room 1	Room 2	Acoustic insu- lation R' <sub>A1</sub>
	Rooms for children	≥48 dB
	General passageway	≥45 dB
Rooms for children	Sanitary and kitchen facilities	
	Administration room	≥50 dB
	hurseries, kindergartens from ts (in residential buildings)	≥58 dB













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Calculator of the Nida systems www.siniat.pl/kalkulatory



## Hospitals and health care facilities

The minimal R'A1 acoustic insulation value for walls without doors separating type 1 and 2 rooms.



Room 1	Room 2	Acoustic insu- lation R' <sub>A1</sub>
	Bedroom	≥45 dB
Bedroom	Corridor	≥40 dB
	Kitchen	≥50 dB
Operation rooms	Other rooms	≥55 dB
	Other bedrooms, corridor	≥48 dB
Intensive care rooms	Corridor	≥45 dB
As above and in sanatoriums and outpatient	Doctor's office, treatment room, nurse room, hospital bedrooms, patients' rooms	≥48 dB
clinics	General passageway	≥45 dB
Between patie	nts' rooms in sanatoriums	≥48 dB
Patients' rooms	General passageway	
	Rooms with sources of acoustic interference	≥48 dB
	- sanitary areas, kitchen areas	≥50 dB
Aforementioned areas	- leisure areas	≥50 dB
	- technical rooms with building structural equipment and machinery	Individually, but min. ≥ 60 dB

ACOUSTIC INSULATION REQUIREMENTS:

## Tourist accommodation buildings (tourist hotels, guesthouses, resorts)

Minimal R'A1 acoustic insulation value for walls without doors separating type 1 and 2 rooms.



#### ACOUSTIC INSULATION REQUIREMENTS:

Room 1	Room 2	Acoustic insu- lation R' <sub>A1</sub>	
	Hotel rooms, administrative rooms, general passageways	≥45 dB	
	Sanitary areas, kitchen areas		
	Rooms with sources of acoustic interference:	≥50 dB	
Hotel rooms	<ul> <li>technical rooms with building structural equipment and machinery</li> </ul>	Indyvidually, but min. ≥ 58 dB	
	- trade and service areas,	≥58 dB	
	- service areas with music and/or dances	Indyvidually, but min. ≥ 65 dB	

## Hotels

Minimal R'A1 acoustic insulation value for walls without doors separating type 1 and 2 rooms.



Collective accommodation buildings (dormitories, boarding houses, worker's hostels, children's homes, social care homes)

Minimal R'A1 acoustic insulation value for walls without doors separating type 1 and 2 rooms.







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#### ACOUSTIC INSULATION REQUIREMENTS:

Room 1	Room 2	Acoustic insu- lation R' <sub>A1</sub>
	Hotel room, administrative rooms	≥50 dB
	General passageway	
	Rooms with sources of acoustic interference:	≥45 dB
Hotel rooms	- technical rooms with building structural equipment and machinery	Indyvidually, but min. ≥ 58 dB
	- trade and service areas,	≥ 58 dB
- service areas with music and/or dances	- service areas with music and/or dances	Indyvidually, but min. ≥ 65 dB

#### ACOUSTIC INSULATION REQUIREMENTS:

Room 1	Room 2	Acoustic insu- lation R' <sub>A1</sub>	
	Living rooms, general passageways	≥ 45 dB	
	Rooms with sources of acoustic interference:	2 49 08	
Living rooms	- technical rooms with building structural equipment and machinery	Indyvidually, but min. ≥ 58 dB	
	- trade and service areas,	≥ 58 dB	
	- service areas with music and/or dances	Indyvidually, but min. ≥ 65 dB	
Living rooms, administrative rooms, employees' lounges	Sanitary areas, kitchen areas	≥50 dB	





## Higher education and research centre buildings

Minimal R'A1 acoustic insulation value for walls without doors separating type 1 and 2 rooms.



## Court and prosecutor office buildings

Minimal R'A1 acoustic insulation value for walls without doors separating type 1 and 2 rooms.



#### ACOUSTIC INSULATION REQUIREMENTS:

Room 1	Room 2	Acoustic insu- lation R' <sub>A1</sub>
	Courtrooms, interrogation rooms, offices, conference halls, general passageways	≥ 50 dB
Courtrooms, interrogation rooms	Sanitary facilities	
	Technical rooms with building structural equipment and machinery	Indyvidually, but min. ≥ 55 dB
Judicial deliberations room	Other areas	≥ 50 dB

# basic notions and definitions connected with fire protection

The legal basis for fire protection of buildings are the legal requirements presented in the Minister of Infrastructure Regulation of 12th April 2002 concerning the technical conditions that should be met by buildings and their localisation.

The solutions dealing with the passive fire protection presented in this catalogue, including the fire classifications, were developed by the Fire Research Department of the Building Research Institute in Warsaw. The individual drywall partition systems acting as the fire protective measures shall remain valid only when the Siniat system materials listed in the individual fire classifications are utilised.

Fire resistance is the ability of an element of a building to meet specific requirements in the conditions reflecting the course of a fire. The fire resistance measurement is presented as the time counted from the start of a fire to the moment when an element of a building reaches one of the limit values, in minutes:

#### • fire load R,

fire integrity E,

• fire insulation I.

Fire load (R) is the state in which the tested element fails to fulfil its load-bearing function owing to mechanical damage, loss of stability, exceeding the limit values, displacement, or deviation.

Fire integrity (E) is the state in which the tested element fails to fulfil its separating function owing to appearance of flames on the surface not exposed to heat, forming cracks or gaps of dimensions exceeding the limit accepted





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values, which are penetrated by flames and gases, or when the tested element detaches itself the structure.

Fire insulation (I) is the state when the tested element fails to fulfil its separating function by exceeding the limit value of temperature measured on the surface unexposed to heat.



Fire resistance class - the unit of the fire resistance is the time expressed in minutes charactering the fire resistance of the individual elements of a building with utilisation of two or three criteria: fire load R, fire integrity

E, fire insulation I – e.g.: REI120, EI30.

#### Fire resistance class of a building

- five fire resistance classes were distinguished for buildings and they are referred to with utilisation of the following letters in the

following order: A, B, C, D, E. The required fire resistance conditions and the conditions of the fire spread range relate to the individual elements of a building assigned to an appropriate fire resistance class.

In order to define the technical and functional requirements the following subdivision of building height groups was introduced<sup>1)</sup>:

Low buildings (L)	Medium-height buildings (MH)	Tall buildings (T)	High-rise buildings (HR)
Up to and including 12 m above the ground level, or up to and including 4 floors above the ground.	Over 12 m up to and including 25 m above the ground level, or over 4 up to and including 9 floors above the ground.	Over 25 m up to and including 55 m above the ground level, or over 9 up to and including 18 floors above the ground.	Over 55 m above the ground level.



The buildings and parts of buildings treated as individual fire compartments, referred to as HH, are included in one, or more than one of the following levels of fire hazard to humans1):

нн і	НН ІІ	ннш	нн іv	нн v
Including the rooms intended for simulta- neous stay of more than 50 people who are not their constant users, which are not designed primarily for utilisation by people with limited mobility.	Designed primarily for utili- sation by people with limited mobility, such as hospitals, nurseries, kindergartens, and homes for elderly people.	Public utility buildings not qualified to the HH I and HH II categories.	Residential.	Collective housing not qu- alified to the HH I and HH II categories.

Five fire resistance classes were established for buildings or their parts, as are listed below in the order from the highest to the lowest and marked with the letters: A, B, C, D, E. The required fire resistance classes for buildings covered by one of the HH classes are defined in the following table1):

Building	нн	нн ІІ	нн ш	нн іv	нн v
Low (L)	В	В	С	D	С
Medium-height buildings (MH)	В	В	В	С	В
Tall buildings (T)	В	В	В	В	В
High-rise buildings (HR)	А	А	А	В	A

It is acceptable to reduce the required fire resistance class for certain low buildings (L) to a level defined by the following table1):

Number of floors above the ground	нні	нн II	ннш
1	D	D	D
2 <sup>2)</sup>	С	С	D

Except for the contents of § 237 point 9, elements of buildings, adequately to their fire resistance class, should meet at least the requirements in the range of fire resistance as presented in the following table1):

Fire resistance class of building	Main load-bearing structure	Roof structure	Floor <sup>3)</sup>	External wall <sup>3),4)</sup>	internal wall <sup>3)</sup>	Roof covering <sup>5)</sup>
A	R240	R30	REI120	EI120	EI60	E30
В	R120	R30	REI60	E160	EI30 6)	E30
С	R60	R15	REI60	EI30	EI15 <sup>6)</sup>	E15
D	R30	(-)	REI30	EI30	(-)	(-)
E	(-)	(-)	(-)	(-)	(-)	(-)

<sup>1)</sup> Acc. to the Regulation of the Minister of Infrastructure.
 <sup>2)</sup> When the floor above the first level is located at a height not exceeding 9 m.
 <sup>3)</sup> When a partition is a part of the main load-bearing structure it should meet the fire load criteria R, accordingly to the requirements for a specific fire resistance class of the building.
 <sup>4)</sup> The description of the building.

<sup>4)</sup> The fire resistance class of the oblight. <sup>5)</sup> The requirements do not apply to sunroofs, skylights, dormers, roof windows, when the opening in the roofing does not occupy more than 20% of its area. <sup>6)</sup> For chute walls the requirement is EI60, and for chute chamber doors - EI30.







# safety of Nida drywall partition systems is **our highest priority**

Before they are incorporated in building designs, and subsequently installed in the building structures, all the Nida system solutions undergo very strict static tests performed by renowned test laboratories, such as the Building Research Institute. Apart from the specialised products we utilise all the standard products for this purpose. This provides us with certainty that the constructed system solutions meet the highest safety standards.

## Impact of statistical parameters on safety of the Nida drywall partition systems

Each building or construction work, depending on the purpose, must be safe to its users. This is why all the structures must be designed - from their foundations to their roofs with special regard to their load-bearing capacity and durability.

It should also be kept in mind that other elements incorporated in the building structures, including the decorative ones, such as sheathing, non-load bearing partitions, or suspended ceilings, also have impact on safety of their use.

For Siniat as a manufacturer of construction materials, and a provider of ready-to-use system solutions the most important factor is making sure that any areas constructed with utilisation of those are safe and human friendly. In order to reach this goal, the highly specialised technical staff of Siniat working at the internal development centres and external accredited research laboratories perform very strict durability tests on our materials and systems.

Even the most commonly used products, such as the Nida type A plasterboard manufactured acc. to standard PN EN-520+A1, are taken into account during development of our system solutions with regard to safety of use.

This is why this particular product, which met the highest requirements, was given the new name: Nida Expert.

The Nida systems based on the Nida Expert board are:

- Nida Tynk (wall sheathing, pre-walls),
- Nida Sufit (ceiling sheathing, suspended ceilings, self-supporting ceilings)

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- Nida Szacht (encasements for service risers),
- Nida Ściana (partition walls),
- Nida Poddasze (encasements for pitched roofs),

The effect of the wide range of tests which are performed on the Nida systems are the technical opinions (static) issued by the Building Research Institute (Table 1), which facilitate the drywall partition systems designing process, and, what is most important, make them safer.

	Type of system solution	Тур
	Prewalls	
ľ	Sheathing for walls	
	Partition walls	
	Partition walls on double-row structure	
	Flat separating walls	
	Anti-burglar walls	
	Nida LS walls	
	Nida PWA walls	
	Mounting loads on light partitions	
	Mounting loads - anti-burglar walls	1
	Partition walls loaded with ceramic cladding	
	Suspended ceilings	
	Suspended ceiling on UA/CD profiles	
	External suspended ceilings on MFC profiles	
	External suspended ceilings on CD60 profiles	
	Sheathing for ceilings	
	Self-supporting ceilings	
	Encasements for service risers	
	Attic partitioning	
Ī	Smoke barriers	
Ī	Timber floors	

Table 1: List of the technical opinions for the Nida systems

What parameters do we determine for partitions constructed with utilisation of our drywall partition systems in order to ensure their highest safety

All the Siniat products included in the system solutions must be tested for conformity with the national and European standards and obtain a positive result. In order to develop a safe system they are tested together as the components of the system in order to determine the safe parameters of their utilisation. Thus, for partition walls or wall sheathing the most important aspect is determining the maximum safe height of the structure Hmax from the aspect of the linear load, which defines their application within the ranges 1 and 2 (Table 5) and the uniformly distributed load measured in Pa (Table 6). Owing to those complicated examinations we are able to assign the appropriate wall system solutions to the individual room types and categories of use (Tables 2, 3 and 4).

The Nida systems based on the









pe of Nida system	Number of technical opinion
Nida Tynk	ITB 1060/12/R33NK
Nida Tynk	ITB 1060/12/R33NK
Nida Ściana	ITB 01060/21/R164NZK – part 1
Nida Ściana	ITB 1060/12/R48NK
Nida Ściana	ITB 1060/10/R01NK
Nida Ściana	ITB 1060/10/R01NK
Nida Ściana	ITB 1060/12/R42NK
Nida Ściana	ITB 1060/12/R48NK
Nida Ściana	ITB NL-3879/A/06
Nida Ściana (RC)	ITB 01060/20/R152NZK
Nida Ściana	ITB 01060/21/R160NZK
Nida Sufit	ITB 1060/12/R14NK
Nida Sufit	Engineering and Design Office M. Korczakowski
Nida Sufit	Engineering and Design Office M. Korczakowski
Nida Sufit	Engineering and Design Office M. Korczakowski
Nida Sufit	ITB 1060/12/R14NK
Nida Sufit	ITB 1060/12/R33NK
Nida Szacht	ITB 1060/12/R33NK
Nida Poddasze	ITB 1060/12/R14NK
Nida Kurtyna	ITB 01060/17/R121NZK
Nida Strop D	ITB 01060/16/R112NZK

Nida Expert board type:

- Nida Tynk (wall sheathing, pre-walls),
- Nida Szacht (encasements of service risers),
- Nida Ściana (partition walls),

In order to portray a long-lasting and complicated examination process we are presenting a diagram of sensor placement for one of the tested samples utilised for static tests of the Nida partition walls (Fig. 1), as well as a few photographs from the tests (Photograph 1 and 2).





	Purpose	Examples
А	Living areas	Rooms in building and residential buildings, and hospital wards
В	Office areas	
С	Meeting and assembly rooms (with exception of rooms defined in categories A, B, D and E)	<ul> <li>C1: rooms with permanently fixed boards, etc., e.g. classrooms, cafeterias, restaurants, canteens, reading rooms, receptions, etc.</li> <li>C2: rooms with permanently fixed seats, e.g. churches, theatres, or cinemas, conference halls, lecture halls, assembly halls, waiting rooms, etc.</li> <li>C3: rooms without obstacles disturbing human mobility, e.g. museum halls, exhibition halls, etc., passageways in public and administrative buildings, hotels, etc.</li> <li>C4: areas intended for physical activity, e.g. dance halls, gymnasiums, stages, etc.</li> <li>C5: areas exposed to overcrowding, e.g. public event buildings such as concert halls, sports halls including stands, terraces, and access ways.</li> </ul>
D	Commercial spaces	D1: general areas in retail shops, e.g. areas in department stores, stationery stores, etc.
E	Areas for storage of goods, including access	Warehouses, including libraries

Table 2: Definitions of the room categories

Category	Description		
I	Areas available mainly for people demonstrating a high degree of care about property. Low risk of improper use.		
II	Areas available mainly for people demonstrating a moderate degree of care about property. Medium risk of accidents and improper use.		
	Areas available for general public demonstrating a low degree of care about property. Risk of accidents and improper use.		
IV	Areas and risk like for categories II and III. In the case of damage there is a risk of falling down to the floor from the floor above.		

Table 3: Definitions of the categories of use

Category of use	Category of rooms
	A D
	A,B
	C1, C2, C3, C4, D, E
IV	A, B, C1, C2, C3, C4, C5, E

Table 4: The relation between the categories of use and the categories of rooms.

Linear load			Unif	ormly distributed lo	bəd
500N/m100N/mRange 1Range 2			Do 150 Pa	150-200Pa	200-250Pa
cludes walls of rooms occupied by a few pe- ple, e.g. apartment rooms hotel rooms, offices, ospitals, and other, utilised in a similar way	ment rooms hotel rooms, offices, ople, such as large conference halls, classrooms,		able 6: The surface loa cting on both the side		ference of pressures

Table 5: The linear load representing pressure exerted by people on partitions

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	VAILABLE ON THE MA











What parameters are determined for suspended ceilings in drywall partition systems in order to provide the highest level of safety

For the suspended ceilings or attic partitioning the key parameter is their load-bearing capacity in relation to their own weight and the potential additional load (insulation material, or additional decorative elements). Basing on the performed complex tests of the individual sensitive points for ceilings the acceptable load was determined as the minimum of the following three conditions:

• Deflection of the ceiling frame, • Load-bearing capacity of the system suspension elements, • Load-bearing capacity of the frame elements,

The effect of the complex examination process is the fact of formulating the statistical opinions for the suspended and self-supporting ceilings which are the only ones available on the market which can be utilises as basis for designing any non-standard structural arrangements. It is an extremely useful tool for performing safe selection of the desired solutions, at the same time adjusting to the requirements of a given building.

The Nida ceiling systems based on

# The test sample of the durability tests of a partition wall performed at the ITB





# The test sample of the durability tests of a suspended ceiling performed at the ITB



Photo 3

Fig. 2: Diagram of the tested sample (pattern of the load and placement of the sensors for taking the measurements)



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the Nida Expert board:

- Nida Sufit (ceiling sheathing, suspended ceilings, self-supporting ceilings)
- Nida Poddasze (encasements for pitched roofs),

In order to portray the long-lasting and complicated examination processes we are presenting a diagram for one tested sample utilised for the static tests performed on the Nida suspended ceilings (Fig. 2), as well as a few photographs from the tests (Photograph 3 and 4).



Photo 2





Photo 4



**o i**  $\mathbf{\mathbf{E}}$ 



# The first drywall partition systems available on the market featuring the CE marking



We would like to inform you that we are implementing a very important process which shall influence the circulation and range of the approval technical documentation on our market. Siniat company as **the first manufacturer of professional drywall partition systems is introducing complete systems** (system solutions) to the market according to the European Construction Products Regulation CPR. We are the pioneers in this regard in the European market, so we would like to try to explain the true meaning of this fact to us all.

In order to provide the highest level of security with respect to application and utilisation of the complete system solutions, i.e. partition walls, suspended ceilings, or, for example, attic partitioning constructed according to the European Technical Assessment (EOT) ETA 15/0301 and the harmonized standard EN13964:2014-05, the engineers of Siniat have performed a number of very strict tests (BWT).

Our full system solutions which once they are installed can serve their

intended utilitarian function were subjected to specialised strength tests, fire resistance tests, and acoustic tests at various European notified laboratories, including the Building Research Institute laboratory. On the basis of the obtained positive results, as the only manufacturer of such drywall partition systems in the market, we hereby declare all the technical characteristics for the final system with full responsibility. As confirmation of this fact we have issued the Declaration of Performance (DoP) for the Siniat systems and we have

marked them with the CE marking. The formulation diagram of the Declaration of Performance is presented below, with detailed descriptions clarifying the significance of the individual components. As Siniat is the first company in Europe in this respect, the information that we are presenting to you is extremely important for our further co-operation.

## Safe development

Since this day you are fully authorised to inform all your major customers - both the Institutional and Private Investors - of the fact that the Siniat solutions utilised by you in your designs based on such components as the Nida plasterboards, steel profiles, gypsum compounds, and accessories constitute a unique system, which is proven by the CE marking. As a result, you can be assured that the designed solution is safe and shall meet the requirements of the most demanding construction projects non only in Poland, but in all the European Union (EU) markets as well. This situation is a kind of a revolution in our market in the positive sense of this word, which will enable you to widen the range of your activity by developing outstanding construction projects both in Poland and in the area of the European Union as a whole.

# Formal and legal simplification

Apart from certainty that you incorporate the safest construction solutions by Siniat as the components of a fully certified system, the confirmation procedure for the technical solutions will be simplified.

The Declaration of Performance (DoP) issued by us for the system is the most important document which authorises marketing of the system in Poland and in the European Union, pursuant to the

CPR Regulation. Additionally, the DoP shall be the only and sufficient document for confirmation of all the characteristics of the system solution incorporated by you in your designs. It shall maximally simplify the long-lasting and labour-intensive process of gathering and providing the documentation for marketing authorisation.

# Mutually profitable co-operation

It is important to stress that owing to co-operation with Siniat you are the first in Europe to design buildings based on the complete drywall partition systems provided with the CE marking, which indicates the importance of this issue. It should be remembered that the Declaration of Performance (DoP) issued by Siniat transfers 100% responsibility for the declared parameters on the manufacturer, provided the system is constructed appropriately – this fact is a very important change.

# Assistance at the first stage

We are happy to assist you if you have any questions which require a more detailed clarification within this range. All the Declarations of Performance (DoP) for our system solutions are available on our website www.siniat.pl.

# Clarification of terms:

• ETA 15/0301 – European Technical Assessment (ETA) is a documented assessment of performance for a construction product with respect to its key characteristics formulated according to the relevant European Assessment Document (EAD). The European Technical Assessment ETA 15/0301 was formulated by the TSUS notified body for the non-load bearing partition walls, duct encasements, anchored and independent wall sheathing constructed according to the Siniat technology. The document constitutes









the legal grounds for introducing the mentioned systems to the market and providing them with the CE marking in the Polish market, as well as the market of the European Union. Basing on the ETA, Siniat Company issues Declarations of Performance (DoP) for the individual drywall partition systems.

- EN13964:2014-05 harmonised standard: Suspended ceilings. Requirements and testing methods.
- CPR Construction Products Regulation defines the conditions for marketing and introduction of construction products to the market by formulating the harmonised rules for defining the performance properties of construction products with respect to their key characteristics and the rules for application of the CE marking on those products.
- DoP Declaration of Performance is formulated by the manufacturer after introducing the construction product, or a system solution, to the market if they are covered by a harmonised standard, or conform to the European technical assessment issued for them. By formulating those declarations the manufacturer takes responsibility for conformity of this construction product with the characteristics thus declared.





## SAMPLE DECLARATION OF PERFORMANCE (DOP) FOR THE SINIAT SYSTEM SOLUTIONS

Detailed clarification of the individual items

# CE \* siniat **CE MARKING** DEKLARACJA WŁAŚCIWOŚCI UŻYTKOWYCH DECLARATION OF PERFORMANC io. DoP/Wall Syste LOGO OF SYSTEM MANUFACTURER logo of Siniat Sp. z o.c DECLARATION OF PERFORMANCE stem 1/5 ETA 15/0301 (Sciany działowe) / ETA 15/0302 (roruso UNIQUE PRODUCT IDENTIFICATION CODE ÚSTAV STAVEBNÝ, n. o. , Nr 130 BUILDING TE INTENDED USE ogniows /fre H<sub>max</sub>= 3250 + 6500 m bez = 3450 + 11000 r MANUFACTURER SYSTEMS OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE HARMONISED STANDART OR EUROPEAN ASSESMEND DOCUMENT \* siniat TECHNICAL ASSESSMENT BODY DECLARED PERFORMANCE MANUFACTURER'S DECLARATION SINIAT Sp. Z 0.0

The declaration of the manufacturer concerning the performance of the construction product - system.

NAME AND SURNAME OF PERSON COMPILING DOP The name and surname of the person who formulated the Declaration Performance on behalf of the manufacturer.

SINGATURE OF PERSON COMPILING DOP The signature of the person who formulated the Declaration of Perform on behalf of the manufacturer.

# / New board type is warranty for professionals ∩Ida Expert



The engineers of Sinat have introduced a new standard for the type A plasterboard (acc. to the Standard PN EN-520-A1) by subjecting it to many complex strength tests aiming at creating systems for professional contractors. This product is the Nida Expert plasterboard. Owing to this, construction of systems based on plasterboards is even safer, and contractors feel that the effects of their work are going to be of the highest quality.

## The Nida Expert is the plasterboard which meets the highest requirements

The new Nida Expert plasterboard is a

type A board which meets the high

requirements of the new standard

PN-EN-520+A1:2012 "Gypsum

tured with tapered edges.

plasterboards - Definition require-

ments and test methods" (Table 1).

Before the Nida Expert was intro-

thoroughly examined to check

of the Nida system solutions.

duced for production and put up for

whether it meets all the requirements

The Nida Expert boards are manufac-

# Why professional contractors select the Nida Expert gypsum plasterboard

The Nida Expert plasterboard

was developed for the professional contractors who must conform to the highest standards with respect to quality of the performed works. Each building or structure must be safe to its users accordingly to its purpose. All the Nida system solutions with sheathing of the

Nida Expert plasterboards were tested to check whether they meet the highest load-bearing capacity and durability standards at the Building Research Institute in Warsaw.



sale, it had been



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The Nida systems based on the Nida Expert board are:

- Nida Tynk (wall sheathing, pre-walls),
- Nida Sufit (ceiling sheathing, suspended ceilings, self-supporting ceilings)
- Nida Szacht (encasements for service risers),
- Nida Ściana (partition walls on single- and double-row steel frames),
- Nida Dach (encasements of inclined roofs)

The Nida Expert board is accompanied by full documentation required for its introduction to the market (Table 2).



## The Nida Expert board is 100% compatible with any Nida type of structural arrangement, which enables utilisation of the boards with any system

The Nida Expert board can be utilised with any Nida system on the condition that the requirements of the building lie within the range of its applications, Professional contractors most often select the Nida Expert for constructing sheathing of any encasements as they work great for all the types of light sub-structures. Its additional advantage is the fact that its processing, such as cutting, bevelling, or shaping of uncommon shapes, is easy. The factory-made tapered edges of the boards enable easy construction of strong joints with utilisation of the joint fillers manufactured by Siniat with reinforced tapes (such as the system composed of the Nida Start + Nida Finish, Nida Duo, or the readyto-use Nida Pro joint filler)

## The Nida Expert is the only type A gypsum Plasterboard utilising the conformity assessment system no. 3

The conformity assessment system for construction products is selected by the manufacturer on the basis of the harmonised technical specification (i.e. harmonised standard). The adequate level of the selected conformity assessment system is accepted depending on the requirements that the concerned construction materials must meet with respect to their application, either for highly specialised systems, or for passive fire protection systems. The type A gypsum plasterboard, which is intended for utilisation by professionals, should be manufactured under strict control, which is provided by the conformity assessment system no. 3. Siniat is the only company in the Polish market which applied the no. 3 system for assessment of conformity of their Type A 12.5 mm thick gypsum plasterboards. In order to stress the difference between the conformity assessment system no. 3 and the

commonly applied system no. 4, we present a comparison of the WBT (ITT) ranges.

System no. 3, i.e. manufacturer's declaration of conformity of a product on the basis of:

- Initial type testing carried out by an accredited laboratory,
- Factory production control system,

System no. 4, i.e. manufacturer's declaration of conformity of a product on the basis of:

- Initial type testing carried out by the manufacturer,
- Factory production control system,

As it can be seen, the system no. 4 selected by Siniat is an much stricter solution which forces the manufacturer to provide the construction product for examination and tests carried out by independent accredited institutions, such as the Building Research Institute. All the remaining manufacturers operating in our market selected the System no. 4, which allows examination of the their products at their own company laboratories, i.e. by



Detailed description	
	Those gypsum plaster solutions. The core of
Applications	For construction of w and self-supporting c service risers, encase prefabrication of vario not exceeding 70%.
Type acc. to Siniat	
Thickness [mm]	
Width [mm]	
Length [mm]	
Board type acc. to PN-EN 520+A1:2012	
Reaction to fire acc. to PN-EN 520+A1:2012	
Flexural strength in lengthwise direction acc. to PN-EN 520+A1:2012	
Flexural strength in crosswise direction acc. to PN-EN 520+A1:2012	
Steam permeability (for control of diffusion of steam) [ų]	
Thermal resistance (expressed as thermal conductivity) $[\lambda]$	
Bulk density	
Area density (nominal)	

Table 1: Technical parameters of the Nida Expert boards acc. to PN-EN520+A1:2012.

TECHNICAL DOCUMENTATION FOR NIDA EXPERT 12.5 PLASTERBOARD
Declaration of Performance (DoP)
PZH Hygienic Certificate
Product data sheet [REACH]
EPD Environmental Product Declaration
ECOCard (LEED / BREEAM)
Siniat technical data sheet
Related documentation [standard PN-EN 520+A1:2012]

Table 2: Technical documentation



rboards are intended for a wide spectrum of applications within the system is the boards is made of natural gypsum. Factory made edge - tapered.

vall encasements, individual pre-walls, sheathing of ceilings, suspended ceilings ceilings, partition walls, attic and timber floor partitioning, encasements of ements for timber and steel load-bearing structures of buildings, as well as ous building elements. For applications indoors, in areas of relative humidity

Nida Expert
9,5; 12,5
1200
2000; 2600; 3000
А
A2-s1,d0
550 N
210 N
10
0,25 W (m.K)
640 kg/m³
8,0 kg/m <sup>2</sup>

the manufacturers themselves.

# Main areas for application of Nida Expert boards

The range of applications of the Nida Expert plasterboards is virtually unlimited. The list below presents examples of structures where the Nida Expert boards prove to be extremely efficient:

- Single-family residential buildings,
- Multi-family residential buildings,
- Public venues,
- Educational facilities,
- Health care facilities,
- Sports facilities,
- Other.





installing loads on plasterboard walls has never been as simple and safe



Metal expansion plug type so called Molly



Wood screw Ø5 mm



Direct metal plug GKM Driva type by Fischer















用用



53



Calculator of the Nida systems www.siniat.pl/kalkulatory



## Flat decorative elements (thickness up to 10 cm)

\_\_\_\_\_ ∕16





# **Resistex** 1x12,5 mm



Up to **16 kg** on one wood screw (wood screw Ø5 mm)





## Up to **37 kg** on one wood screw (wood screw Ø5 mm)

### Resistex 1x12,5 mm



Up to 40 kg on one plug (GKM S/12 type Driva Fischer direct metal plug)





- 1. Wood screws Ø5 mm must be driven with a screwdriver with a moderate force, avoiding . Wood screws Ø5 mm must be driven with a screwdriver with a moderate force, avoiding stripping the bond between wood screws' thread and the drilled holes. If it is noticed that wood screws do not get embedded in wood, and the bonding effect does not take place (fasteners get embedded to easily, or they are not driven into wood – wood milling effect), the fixing procedure should be performed again at a different spot. The length of wood screws, depending on the number of Resistex board layers, should exceed their overall thickness by min. 20 mm, not taking into account the thickness of the element which is fixed. Fixing with utilisation of Ø5 mm wood screws is recommended for static loads with the maximum thickness of 25 mm, such as bumpers, skirting boards and cornices, decorative panels, surface-mounted electrical equipment (sockets, switches, or wall lamps), heavier paintings. low relieves, etc. paintings, low relieves, etc.
- For multi-point fixing, the minimum distance between the individual mechanical anchoring points should be at least 200 mm for Ø5 mm wood screws and 300 mm for Driva Fischer
- type plugs. 3. For both the mechanical fasteners Ø5 mm wood screws and Driva type plugs the safety factor value 3.0 was assumed. 4. The presented acceptable load values were presented in the Technical Opinion issued by
- the Building Research Institute. In any case, it is always necessary to account for the max-imum acceptable load of Siniat partitions.

# Elements of interior design (depth up to 40 cm and min. height 30 cm)



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 The distance between those metal plugs must not be less than 300 mm.
 For metal plugs such as HM manufactured by Fisher and HHD-S manufactured by Hilti the safety factor of 2.5 was assumed.

The presented acceptable load values were determined in the Technical Opinion issued by the Building Research Institute. In any case it is always necessary to account for the maximum acceptable load of Siniat.





work safety

Safety of the performed assembly works is of great importance. The rules of safe performance of works should be known and followed at each construction site, this is why a short overview of the rules within this range is presented as a reminder.

## Procedure in case of an accident

- Protection of the place of accident which excludes:
- » access of unauthorised individuals to the place of accident:
- » start of the machines and any other technical equipment which was stopped in connection with the accident without an explicit need
- » alternation of the localisation of machines and any other technical equipment, as well as changing the localisation of any other items which

## First aid

- The employer is obliged to provide the workers with an efficient first aid system in case of an accident and any appropriate means for providing first aid, especially:
- First aid posts in the departments (units) where works connected with high risk of accidents, or resulting in generation of harmful fumes, gases, or dust are performed, they should be equipped with washbasins with warm and cold water, all the necessary equipment, and other means for providing first aid;
- First aid kits in individual departments (units) of the workplace.

- caused the accident, or could be utilised to recreate the circumstances of the accident.
- » Providing first aid to the victims.
- » Undertaking the necessary steps to eliminate, or limit the risk.
- » It is required to inform the labour inspector and the prosecutor of a fatal, serious, or group accident at work, and of any other accident which resulted in the mentioned

above consequences related to work, when such an accident can be classified as an accident at work.

- » Immediately determine the circumstances and causes of the accident.
- » Incorporate appropriate means preventing similar accidents.
- » Prepare proper documentation of the accident.
- The first aid posts and the places where the first aid kits are located should be properly marked, according to the Polish standard, and easily accessible. • If any works are performed at a
- distance exceeding 500 m from a first aid post, a portable first aid kit should be available at such work place.

# OHS training

- The initial training is carried out according to the programs formulated for the individual posts (occupations) and it covers:
- the general initial training, hereinafter referred to as the "general training" - initial training at the work post, hereinafter referred to as the "on-the-job training",
- the basic initial training, hereinafter referred to as the "basic training"
- The general training is provided to all the newly employed workers, as well as high school students undergoing internship, and vocational school students undergoing their practical vocational training in workplaces - before they are allowed to commence their work.
- The general training should familiarise its participants with the basic work safety and hygiene regulations stated by the Labour Code, the collective labour agreement, the rules for occupational health and safety in force at a given workplace, and the regulations concerning providing the first aid.
- The general training is carried out by health and safety service employees, by the employers themselves, or employees designated by the employers who have completed valid work health and safety training.
- The on-the-job training should familiarise its participants with the risks present at the individual work stations, the ways of protection against risks, and the methods of working safely at a given work post.
- The on-the-job training is carried out before commencing work at a work post is allowed with regard to:
- workers employed as labourers and other, whose work is connected directly with production, or control over production, or subject to occupational risk;
- workers transferred to the posts mentioned above and employed at those posts after any technical and organisational conditions are

changed, with special stress on any changes of the technological process, organisation of workspaces, introduction of harmful or dangerous substances, or new tools, machines, or any other equipment;

- their internship.
- A worker employed at a few for each of the individual posts.
- their previous work experience,
- out by a person managing the fications and work experience methods of providing training.
- authorise a worker to work at a given work post.
- and rules.
- The basic training takes place work at a given post for:









designated employees trained in • The first aid instructions, as well as lists of the employees trained

• The number, localisation and equipment of the first aid posts

must be determined in co-ope-

ration with a doctor providing

health care to the employees,

taking into account the types

and intensity of the occurring

• Operation of the first aid posts

and the first aid kits for each

in first aid should be placed in

posts and in the vicinity of the

Promat

visible places at the first aid

shift should be assigned to

risk.

first aid.

first aid kits.

» vocational school students undergoing their practical vocational training and high school students undergoing

different posts should complete on-the-job training sessions valid • The duration of the on-the-job training should depend on the vocational preparation of a given worker, and the nature of work and risks connected with the work post the worker is going to be employed at. • The on-the-job training is carried workers possessing proper qualidesignated by the employer, who was trained with respect to the • The on-the-job training should be concluded with a test of knowledge and skills within the range of performing work according to the work rules concerning health and hygiene and any regulations, which

• Completion of the general training and the on-the-job training by a worker should be confirmed by the worker in writing and recorded in the personal file of the employee. • The basic training should provide the workers with the knowledge and skills necessary to perform, or organise work according to the work health and safety regulations

within the period of time not exceeding 6 months since commencing

- » individuals who are employers;
- » individuals managing workers, especially:
- » heads of departments, masters, foremen, workers employed in labour positions, designers of machines and other technical equipment, technologists, production organisers, and other engineering and technical workers,
- » work health and safety service workers;
- » any workers whose work is connected with exposure to factors which are harmful to health, burdensome, or dangerous, or whose work is related to responsibility in the range of work health and safety.
- The basic training is carried out according to a specified program.
- For any positions connected with especially high health and accident hazard, the basic training should be carried out before commencing work in those positions. The list of such positions is formulated by the employer.





## Periodic training

- The aim of the periodic training is updating and strengthening the workers' knowledge and skills with respect to the issues of work health and safety which they acquired during the initial training, as well as presenting any new technical and organisational solutions in this sphere.
- The periodic training is carried out according to a specified program.
- The frequency and duration of the periodic training is defined by the employer after consulting

the trade union organisation. When there is no trade union organisation present - such decisions are made by the employer after consultations with the representatives of the workers selected by the staff according to the regulations accepted at a given workplace, having the following in mind:

» training of the workers employed in the labourer positions should be carried out in the form of instruction at least once per 3 years, and in the case of the workers employed in the labourer positions with especially high hazards for health and accident hazards, at least once a year, in the case of the workers employed in any other positions such training should be provided at least once every 6 years.



# Basic safety rules for work at heights

- Portable ladders utilised in workplaces should meet the requirements of the Polish standards.
- When portable ladders are utilised it is unacceptable to:
- » utilise damaged ladders;
- » utilise ladders for handling weights exceeding 10 kg;
- » utilise A-framed ladders as leaning ladders;
- » set ladders on unstable ground;
- » lean ladders against slippery surfaces, light objects, easily tipping objects, or piles of materials not ensuring stability of ladders;
- » place ladders in front of closed doors, if they are not locked with a key from the side of the set up ladder; » climb up and down ladders
- backwards;
- » handle a ladder exceeding 4 m of length by one person.
- A ladder should be extended over the surface it leads to by at least 0.75 m, and its inclination angle should be from 65° to 75°.
- Individuals working at a height of at least 1 m above the floor or ground level should be protected against falling from that height by installing

# Regulations for safe performance of works with utilisation of hand tools

- Impact tools (hammers, chisels, punches) must not have:
- » damaged working tips flattened and sharp edges at the place the tools are held with a hand
- » cracks, splinters, etc.;
- » handles shorter than 0.15 m.
- The size of wrenches for nuts must be selected exactly accordingly to the size of the nuts. It is forbidden
- to unscrew and tighten nuts tool.

harness)

the railing.

tall railing.

- Wedges, chisels, or punches through metal elements, or shorter than 0.7 m. When powder actuated
- fastening



railings consisting of protective handrails placed at the height of at least 1.1 m and curbs of minimal height 0.15 m. A crossbar should be placed in the middle of the distance between the handrail and the curb, optionally, this space should be filled in a way which makes it impossible for people to fall through. • If application of those protective measures is impossible owing to the sort and conditions of the performed works, other effective measures of protection against falling from heights should be applied, appropriately for the type and conditions of the performed works (e.g. safety

 Works at heights should be organised and performed in a way which does not force people to lean over

· Openings in floors on which works are performed, or which are easily accessible, should be protected against the possibility of falling, or separated with utilisation of 1.1 m

 Work platforms constructed of timber boards, or logs should be adjusted to the designed load, tight and protected against repositioning.

- Assembly of scaffolds, their utilisation and disassembly should be performed according to their manufacturer's instructions, or an individual design.
- Independent scaffolds should be equipped with circulation paths.
- Scaffolds must be set up on stabilised and profiled substrate.
- Workers performing the scaffolding assembly and disassembly work should be protected against falling from heights.

with a wrench extended with utilisation of a pipe, or another

utilised for cutting, or punching demolishing structures should be equipped with handles not

- tools are utilised, it is necessary to apply adequate measures for protection people against accidents.
- Such tools must be operated exclusively by workers authorised to perform such tasks, who are obliged to follow the detailed regulation presented in the manual.



# Basic OHS requirements during manual handling

Manual displacement and transport of items with weight exceeding the valid standard is unacceptable.

#### Handling items by a single employee (men)

- The weight of the items carried by a single employee must not exceed:
- 30 kg for constant work;
- 50 kg for temporary work;
- Manual transport of items with weight exceeding 30 kg to a height exceeding 4 m, or a distance exceeding 25 m is unacceptable.
- During manual handling of items it is advisable to ensure presence of the support equipment whenever it is possible, it should be selected accordingly to the size, mass, and type and ensuring safe and convenient performance of work.
- An item which is transported manually should not limit the worker's field of view.

• Items should be carried as close to the body as possible.

#### • Manual transport of objects through rooms, stairs, corridors, or doors which are too narrow for the size of the objects, if give rise to the risk of an accident, is unacceptable.

- The surface on which the manually handled objects are placed should be smooth, stable, and not slippery.
- Manual rolling of round objects (barrels, pipes of high diameter) is acceptable when the following conditions are met:
- » the w eight of the objects rolled on horizontal surfaces must not exceed 300 kg per one worker;
- » weight of the objects rolled up a ramp by a single worker must not exceed 50 kg.

- Group handling of objects
- Manual transport of objects with length exceeding 4 m and weight exceeding 30 kg should be performed in groups, with the condition that the weight per one worker is:
  - » 25 kg for constant work; » 42 kg for temporary work;
- Manual transport of objects with weight exceeding 500 kg is unacceptable.

- When any objects are transported manually it is necessary to ensure that
- » the participating employees are of similar height and age and they must work under supervision of an employee experienced in the sphere of proper ways of manual transport of objects and organisation of work, which was appointed by the employer for this task:
- » the distances between workers must be at least 0.75 m and proper support equipment must be utilised.
- Transporting long and heavy objects should be carried out with utilisation of the support equipment which enables transporting such objects possibly low above the ground.
- When long and heavy objects are carried on the workers' shoulders it is necessary to ensure that the workers:
- » lift and lower the carried object at the same time, on command:
- » are located on one side of the carried object;
- » use individual means of shoulder protection.

- Moving objects with utilisation of manually moved carts and wheelbarrows
- The maximum acceptable weight area with a hardened surface
- must not exceed 450 kg per a of the cart,
- cart must not exceed 350 kg.
- - The utilised carts should provide stability during the loading and unloading procedures.
  - The rail carts and wheeled carts
  - The way of loading and localimovement.
  - ensures its safe performance.

# Mechanised equipment, support and devices

- For performing any construction and assembly works, it is possible to employ only workers who:
- » are qualified for a given post according to other regulations, hold health certificates which state that they are fit to be employed for performing the specified work.
- It is not possible to employ a worker for a given position if
- there are any medical contrainprior training with respect to work safety and hygiene. Performing the duties of an
  - issued by an



of a load moved on a cart on a flat single worker, including the weight

 When a load is moved on inclinations exceeding 5%, the weight of the load, including the weight of the • It is unacceptable to move manually loads on carts when inclination of the surface exceeds 8% and the distance exceeds 200 m.

moved on inclined surfaces should be equipped with working brakes. sation of the loads on the carts and wheelbarrows should ensure their balance and stability during

• The objects transported with utilisation of carts should not protrude beyond the outline of a cart, or limit the field of view. In special cases it is acceptable to transport objects without meeting this requirement on the condition that work is performed under supervision which • The weight of the load placed on a wheelbarrow, including the weight of the wheelbarrow, must not exce-

dications present and without operator of construction machinery, crane, forklift truck, and other power-driven construction machinery requires qualifications ed: 100 kg for hard surfaces and 75 kg for not-hardened surfaces.

### Examples of works especially burdensome, or harmful for women's health

- It is unacceptable to perform the following manual tasks:
- » lifting and carrying weights exceedina:
- 12 kg for constant work; - 20 kg for temporary work (up to 4 times per hour during a
- work shift).
- » carrying upwards up ramps, stairs, etc., with max. inclination angle 30°, and height 5 m - weights exceeding :
- 8 kg for constant work; - 15 kg for temporary work (up to 4 times per hour during a work shift).
- It is unacceptable to transport weight exceeding:
- » 50 kg when transported with utilisation of single-wheel wheelbarrows (inclination not exceeding - 2%)
- » 80 kg when transported on 2,3 and 4-wheeled carts (inclination not exceeding - 2%)
- » 300 kg when transported on carts on rails (inclination not exceeding 1%).
- Those acceptable weights include the weight of the transport vehicle and consider transport of weights on flat, hard and smooth surfaces.

- adequate qualification committee,
- The machines, appliances and equipment subject to technical supervision which are utilised at a construction site should be accompanied by proper documentation authorising their utilisation.



- The utilised mechanized and support equipment should meet the appropriate parameters, such as acceptable load, load-bearing capacity, pressure and temperature, which should be permanently and clearly marked on the eauipment.
- Exceeding the acceptable capacity limits of the mechanised and support equipment is forbidden.
- The moveable mechanical parts of the mechanised and support equipment posing threat to safety should be provided with covers preventing accidents.
- The mechanised and support equipment should checked before commencing work and working shift to make sure whether it is in good working condition and safe to utilise.
- The mechanised equipment should be protected against gaining access by unauthorised individuals.
- Performing repairs, greasing and cleaning of the mechanised equipment when it is running is forbidden.

## Personal protective equipment and work clothes and footwear

- Employers are obliged to provide their workers with personal protective equipment protecting against the effects of dangerous and harmful factors which occur at the workplace free of charge, and inform them about the way in which this equipment can be utilised.
- Employers are obliged to provide their workers with personal protective equipment which meets the conformity assessment requirements.
- Employers are obliged to provide their workers with work clothing and footwear meeting the requirements presented in the Polish Standards free of charge:
- » if the workers' own clothes can get damaged or significantly dirty owing to the technological, sanitary, or

work safety and hygiene requirements.

- The types of the personal protection equipment, clothing and footwear, utilisation of which is necessary at specific workplaces, as well as the periods during such clothing and footwear is supposed to be utilised are determined by the employer in coordination with the trade union which is present. If there is no trade union organisation present, the employer makes those decision in coordination with workers selected for this task by the employees under the procedure adopted at the specific workplace.
- Employers must not allow any employee to work without the appropriate personal protection equipment and without work

clothing and footwear, which were deemed as necessary for a particular workplace.

- The employer is obliged to ensure that the personal protection equipment, as well as the clothing and footwear provide proper protective and operational characteristics, and ensure their washing, conservation, repairs, dust removal, and decontamination.
- When an employer is not able to provide the washing service for the work clothing, this can be done by the employees on the condition that appropriate cash equivalent is paid to the employees to cover the expenses incurred by them.

# Detailed regulations concerning utilisation of personal protective equipment

- The personal protection equipment should be used in the situations when it is impossible to avoid risks, or its impossible to limit such risk sufficiently with utilisation of collective protection measures, or proper organisation of work.
- The personal protection equipment provided to employees should:
- » be appropriate to the existing risk and shouldn't cause increase of the existing risk:
- » take into account the conditions present at the place of work:
- » take into account the requirements of ergonomics and the employees' state of health;
- » be adequately fit for utilisation

- after any necessary adjustments are performed.
- When more than one type of risk is present and it is necessary to utilise numerous kinds of personal protection equipment, it should be possible to adjust such measures to each other without compromising their protective qualities.

- Depending on the risk level, the frequency of exposure to such risk, the characteristics of the workplace for each of the workers, and efficiency of the personal protection equipment, employers should define the conditions for utilisation of the personal protection equipment, especially the time and circumstances when they should be utilised.
- The personal protection equipment should be intended for personal use. In special situations it is acceptable for a single personal protection device to be used

by more than one person, on the condition that actions aiming at excluding any undesirable influence on health and hygiene of workers are undertaken. The personal protection equipment should be utilised according to its intended purpose, excluding special and exceptional situations, following the instructions provided by the employer (they should be understandable for the employees and should define the ways such equipment should be used, its control and maintenance

procedures).

			Most endangered parts of body											
				Head				Upper limbs Lower limb			limbs	s Other		
		Risks	Skull	Face	Eyes	Hearing organ	Respiratory system	Hands	Arms	Feet	Legs	Skin	Torso including abdomen	Reproductive
		Falls from heights	•					٠	•		•			
		Explosions, impacts, concussions, crushing	•			•		•	•	•	•	•	•	
	Mechanical	Punctures, cuts, abrasion		٠	٠			•	٠	٠	•	٠	٠	
		Slips, falls						•		٠	•			
Physical		Shakes (vibrations)						٠	•	•				
	Thermal	High temperature, fire		•	•		•	•	•	٠	•	•		
		Cold		•		•	•	•		•		•		
	Electrical					•	•	•	•	•				
	Radiation	lonising		•	•			•		•			•	•
		Non-ionising		•	•			•				•		
	Noise					•								
		Dust, fibres			•		•					•		
	Aerosols	Smoke			•		•							
Chemical		Mist		•	•		•	٠						
	Liquids	Submersion						٠		•	•			
		Splashing, sprinkling		•	•			•	•	٠	•	٠	•	
	Gas, fumes			•	•		•							
	Harmful bacteria			•	•		•	•				•		
	Harmful viruses						•	•				•		
Biological	Fungi				٠		•					•		
	Biological antiger	ns different from micro-organisms										٠		
	Protozoa and inve	ertebrates					٠					•		









• If it is necessary in order to ensure proper utilisation of the personal protection equipment,

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- - the employer should organise presentations of such equipment utilisation.
- When the personal protection equipment necessary for individual works is selected, the employer should take into account the guidelines presented in the tables below:

#### RISKS WHICH REQUIRE UTILISATION OF PERSONAL PROTECTION EQUIPMENT



#### Works where utilisation of personal protective equipment is required (extract)

Types of personal protection equipment	Types of work which require utilisation of personal protection equipment
Protective clothing	<ul> <li>Works with exposure to water, chemical agents, dust, mechanical and biological, as well as high and low temperatures,</li> <li>work with hazardous exposure to chemical, biological substances and dust hazardous to health;</li> <li>work with hazardous exposure to carcinogens;</li> <li>work outside with exposure to rain, or cold;</li> <li>work in areas with very low temperatures, including refrigeration chambers;</li> <li>works that might result in wetting of a worker's body, or soaking of clothing as a result of utilisation of water, solutions, bath, liquid substances, oils, fats, or any other liquids, moist, oily, or greasy substances.</li> </ul>
Head protection equipment 1) protective helmets 2) head wear	<ul> <li>Works which expose workers to head injuries, including especially:</li> <li>construction works, especially work on scaffolds and in their vicinity, assembly and disassembly of form work, demolition of buildings, assembly and installation works;</li> <li>works performed in the vicinity of lifting machines, cranes, conveyors.</li> <li>Works connected with the risk of catching hair, wetting the head, or contamination with toxic waste substances and materials, irritants, corrosive materials, prone to decomposition, or potential sources of infections, as well as those performed in low, or high temperatures, especially:</li> <li>Works performed outside, exposed to rain, or low and high temperatures;</li> <li>Works during which workers' hair can be pulled in by moveable parts of machines, or mechanical devices.</li> <li>Works connected with the risk of catching hair, wetting the head, or contamination with toxic waste substances and materials, irritants, corrosive materials, prone to decomposition, or potential sources of infections, as well as those performed outside, exposed to rain, or low and high temperatures;</li> <li>Works connected with the risk of catching hair, wetting the head, or contamination with toxic waste substances and materials, irritants, corrosive materials, prone to decomposition, or potential sources of infections, as well as those performed in low, or high temperatures, especially:</li> <li>Works performed in low, or high temperatures, especially:</li> <li>Works performed outside, exposed to rain, or low and high temperatures;</li> <li>Works performed outside, exposed to rain, or low and high temperatures;</li> <li>Works performed outside, exposed to rain, or low and high temperatures;</li> <li>Works during which workers' hair can be pulled in by moveable parts of machines, or mechanical devices.</li> </ul>
Protective equipment for lower limbs	Works connected with the risk of occurrences of injuries of lower limbs (including burns), wetting, or contamina- tion with toxic waste substances and materials, irritants, corrosive materials, prone to decomposition, or potential sources of infections, as well as those performed in low, or high temperatures, especially: • demolition works, construction works, assembly, or disassembly of scaffolds, concrete form work assembly, or disassembly, and other works performed at a construction site, with possibility of injury of feet with nails, or sharp objects; • works on bridges, steel structures, masts, towers and cranes; • works where legs are exposed to contact with very hot, or very hot materials; • maintenance and renovation works; • transport and storage of heavy elements, which can fall down on feet causing injury; • works with risk of falling from heights owing to slipping, including works on roofs; • works with utilisation of chainsaws, including trimming and cutting down trees;
Protective equipment for upper limbs	Works causing risk of occurrences of injuries of arms and hands (also related to high temperatures, vibrations, and chemical substances), works in contact with water, toxic substances, corrosive substances or irritants, with mate- rials prone to decomposition and possible sources of infections, and works in low temperatures, especially: • works with utilisation of sharp, cutting, piercing, burning, or extremely rough items or materials, or any other that might result in hand injuries, excluding works connected with operation of machines, where risk of pulling in gloves exists; • works exposing workers to chemical and biological substances which are dangerous for human health; • works where hands of workers are exposed to contact with toxic, corrosive, or irritant substances; • work with hazardous exposure to carcinogens.

Types of personal protection equipment	Types of work where utilisation of pers
Face and eye protection equipment	Works where face and eyes of workers harmful factors, especially: • works where eyes are exposed to con other particles, or vapours of corrosive • works with lasers; • dry sanding, cleaning or removal of s shing, which can cause penetration of • works connected with spraying of liq
Respiratory duct protection equipment	Works with exposure to excessive con deprivation, especially: • works with exposure to inhalation of
Hearing protection equipment	Work in conditions where noise levels • work with utilisation of pneumatic to

Dermatological measures of personal protection Works which exposure • work with exposure

#### List of personal protection equipment (extract)

Types of personal protection equip
Clothes; overalls; jackets; vests; tro pads; back pads; torso protectors; trousers; fluorescent covers; prote
Protective helmets; protective helm headwear.
Protective gloves; finger protector: tors; forearm and arm protectors; o
Boots; shoes; galoshes; sandals; fo other types of leg protection.
Glasses; goggles; face shields, incl
Noise cancelling plugs; noise canc
Cleaning equipment for constant v ment for constant work; escape cl
Safety harnesses and waist belts; s tion against falling from heights.
Skin covering agents, lotions, paste





Promat







#### Works where utilisation of personal protective equipment is required (extract)

f personal protective equipment is required

orkers are exposed to injury or irritation resulting from impact of dangerous and

to contact with clearly irritant substances, such as sand dust, coal dust, or any rosive substances;

 of scaling with utilisation of a hammer, or any other types of work causing splaon of sharp particles, molten metals, or corrosive liquids into eyes; of liquids.

e contamination of the air with harmful agents, or in the conditions of oxygen

on of harmful dust, gases, vapours, or smoke.

Work in conditions where noise levels exceed the highest acceptable intensity, especially: • work with utilisation of pneumatic tools; • cutting wood with utilisation of a circular saw, or a chainsaw.

Works which expose workers to skin injuries, including especially: • work with exposure to pitch dust, or any other types of dust, or vapours, which irritate skin in a similar way.

#### ipment

rousers; aprons; front aprons; coats; capes; shoulder pads; chest pads; abdomen s; head and neck protectors; fluorescent vests; fluorescent jackets; fluorescent cective clothing of other types.

elmets with additional equipment; hats; caps; hats; hoods; berets; scarves; other

prs; hand protectors; wrist protectors; writs and forearm protectors; elbow protec-; other types of arm and hand protection.

foot protectors; shin protectors; knee protectors; thigh protectors; tube socks;

cluding semi-shields and visors; shields; other types of face and eye protection.

celling earmuffs; noise cancelling helmets; other types of hearing protection.

work, including filtering, absorbing, and filtering and absorbing; insulating equipcleaning equipment, including absorbers and combination filters, including SCBAs

; safety ropes; shock absorbers; self-braking devices; other equipment for protec-

stes, ointments; skin cleaning agents; skin regeneration agents.







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