

- Seltz-Petrash, A.E., 378
 Sentler, L., 407
 separation joints, 134
 serviceability considerations, 365, 584f–591f
 camber, 365, 582
 drifts of walls and frames, 365, 580–581
 durability, 365, 582
 expansion and contraction, 365, 582
 long-term deflection, 365, 582
 vertical deflections, 365, 579–580
 vibrations, 365, 581
 serviceability wind speeds, 512
 service lines, 123
 Shahid, S., 509, 510
 Shan, L., 461
 shear building model, 494
 shear keys, 136
 shear panel, 61
 shear wall-frame interactive system, 59, 61–62
 shear walls, 78, 82f
 shear wave velocity average, 204
 Sheet Metal and Air Conditioning Contractors' National Association, 486
 shielding, 506
 Siess, C.P., 394
 sign convention, 245
 signs
 open, 313f
 solid attached, 308, 563–564
 Simiu, E., 456, 461, 511, 513, 576
 Simpson, R., 511
 Sinclair, R.E., 455
 site class, 61, 65, 203–204
 site classification procedure
 site class definitions, 203–204
 site class F soil, 203
 site-specific ground motion procedures, 67
 SJI (Steel Joist Inst.), 236
 Skerlj, P.F., 511
 sloped roof, 31, 430–431, 436
 Smilowitz, R., 394
 Smith, C.E., 519
 snow, 47, 458
 snow loads, 440f–442f
 balanced and unbalanced loads for roofs, 37f, 39f, 40f
 configuration of drifts on lower roofs, 41f
 determining drift height, 41f
 determining roof slope factor, 36f
 in excess of design value, 425
 existing roofs, 33
 exposure factor, 30t
 flat roof, 29, 31, 427–430, 435, 436
 ground, 29, 30t, 34–35f, 408f, 425–427, 443t–445t
 methodology, 425
 partial loading, 31–32, 38f, 431
 ponding instability, 33, 434
 rain-on-snow surcharge load, 33, 434, 435, 436
 in Rocky Mt. states, 427
 roof drifts, 32–33, 40f, 41f
 roof projections and parapets, 433
 sliding snow, 33, 433–434
 sloped roof, 31, 430–431
 symbols, 29
 thermal factor, 30t
 unbalanced roof, 32, 37f, 431–433, 435, 436
 soft clay, 203
 soil loads, 11–12, 11t, 397–398, 404t–406t
 soil-structure interaction, 501
 equivalent lateral force procedure, 199–201, 201f
 modal analysis procedure, 201–202
 Solari, G., 519
 Southern Building Code Congress International (SBCCI), 447
 space frame system, 59
 special flood hazard areas, 21, 415
 special hydraulic structures, 149
 special impact loads, 411, 418
 specific local resistance method, 379
 Speck, R. Jr., 432
 St. Pierre, L.M., 576
 stacks, 148
 stadiums, 409–410
 standard penetration resistance average, 204
 Stanton, J., 490
 Stathopoulos, T., 525, 564, 571
 steel
 cables, 129
 cold-formed, 127–129
 deck diaphragms, 129
 reinforcing, 360
 seismic design/detailing, 127–129
 structural, 127, 360
 testing of reinforcing/prestressing, 361–362
 testing of structural, 362
 steel intermediate moment frames, 79
 Steel Joist Institute (SJI), 447
 steel ordinary moment frames, 79
 stepped roofs, 339
 storage racks, 61
 story, 61
 story above grade, 470, 470f
 story above grade plane, 61
 story drift, 61, 92, 97, 97t, 174–175