Released: September, 2008

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

| | | | | Total F | lectricity | Consumr | ntion (trill | ion Rtu\ | | | |
|--------------------------------------|------------|-----------------------|--------------|----------|-----------------------|---------------|--------------|--------------------|--------------------------|----------------|----------|
| | Total | Space Heat- ing | Cool- ing | Venti- | Water Heat- ing | Light- ing | Cook- ing | Refrig- eration | Office Equip- ment | Com- puters | Other |
| All Buildings* | 3,037 | 115 | 397 | 384 | 52 | 1,143 | 22 | 354 | 64 | 148 | 357 |
| Building Floorspace | | | | | | | | | | | |
| (Square Feet) | 000 | 40 | 40 | 40 | 4.4 | 00 | - | 407 | • | 40 | 00 |
| 1,001 to 5,000 | 386 | 19 | 43 | 18 | 11 | 93 | 7 | | 8 | 12 | 38 |
| 5,001 to 10,000 | 262 | 12 | 35 | 17 | 5 | 83 | 4 | 56 | 6 | 9 | 35 |
| 10,001 to 25,000 | 407 | 20 | 46 55 | 44 | 8 | 151 | 3 | | 9 | 19 | 54 |
| 25,001 to 50,000 | 350 | 15 | 55 57 | 50 | 9 | 121 | 2 | | 7 | 16 | 42 |
| 50,001 to 100,000 | 405 | 16 | 57 | 65 | 7 | 158 | 2 | | 6 | 18 | 45 50 |
| 100,001 to 200,000 | 483 | 16 | 62 | 80 | 5 | 195 | 1 | | Q | 31 | 56 |
| 200,001 to 500,000 | 361 | 8 | 51 | 54 | 5 | 162 | 1 | | 8 | 19 | 43 |
| Over 500,000 | 383 | 8 | 47 | 56 | 3 | 181 | 2 | 12 | 8 | 23 | 43 |
| Principal Building Activity | 074 | 4.5 | 7. | 00 | 4.4 | 440 | ^ | 40 | 4 | 00 | 0.4 |
| Education | 371 | 15 | 74 | 83 | 11 | 113 | 2 | | 4 | 32 | 21 |
| Food Sales | 208 | 6 | 12 | 7 | Q | 46 | 2 | | 2 | 2 | 10 |
| Food Service | 217 | 10 | 28 | 24 | 10 | 42 | 13 | | 2 | 2 | 15 |
| Health Care | 248 | 6 | 34 | 42 | 2 | 105 | 1 | | 4 | 10 | 36 |
| Inpatient | 178 | 3 | 25 | 38 | 2 | 76 | 1 | 4 | 2 | 7 | 21 |
| Outpatient | 69 | 3 | 9 | 4 | (*) | 28 | (*) | 4 | 2 | 3 | 15 |
| Lodging | 235 | 14 | 24 | 14 | 12 | | 2 | | | 6 | 24 |
| Retail (Other Than Mall) | 211 | 6 | 25 | 16 | 2 | 111 | (*) | 22 | 3 | 4 | 22 |
| Office | 719 | 33 | 101 | 63 | 7 | 281 | 1 | 35 | 32 | 74 | 91 |
| Public Assembly | 167 | 5 | 35 | 63 | (*) | 27 | (*) | 9 | Q | 3 | 23 |
| Public Order and Safety | 57 | 2 | 8 | 10 | 3 | 18 | (*) | 3 | 1 | 2 | 10 |
| Religious Worship | 62 | 3 | 11 | 5 | (*) | 17 | (*) | 6 | (*) | 1 | 18 |
| Service | 149 | 6 | 15 | 24 | (*) | 63 | Q | | 1 | 3 | 28 |
| Warehouse and Storage | 244 | 5 | 13 | 20 | 2 | 132 | | | 2 | 5 | 30 |
| OtherVacant | 133 15 | 2 1 | 16 2 | 11 1 | Q Q | 59 4 | Q Q | | Q Q | 5 (*) | 22 7 |
| | | | | | | | | () | | . , | |
| Year Constructed | 00 | 2 | • | 44 | ^ | 24 | 4 | 47 | • | 4 | 40 |
| Before 1920 | 90 | 2 | 6 | 11 | Q | 34 | 1 | 17 | 2 | 4 | 12 |
| 1920 to 1945 | 208 | 4 | 16 | 30 | 2 | 89 | 1 | 26 | 3 4 | 8 | 30 |
| 1946 to 1959 | 231 | 8 | 26 | 34 | 5 | 87 | 2 | | = | 11 | 28 |
| 1960 to 1969 | 327 | 12 | 43 | 50 | 5 | 113 | 1 | 40 | 6 | 18 | 39 |
| 1970 to 1979 1980 to 1989 | 572 | 27 28 | 72 91 | 74 66 | 10 12 | 220 236 | 4 | 58 66 | 12 15 | 27 37 | 67 72 |
| | 627 | | | | | | | | | | |
| 1990 to 1999 2000 to 2003 | 690 293 | 24 10 | 99 45 | 88 32 | 12 4 | 246 116 | 6 3 | | 17 4 | 35 9 | 78 32 |
| Consus Region and Division | | | | | | | | | | | |
| Census Region and Division Northeast | 503 | 20 | 37 | 67 | 6 | 206 | 2 | 58 | 12 | 30 | 64 |
| New England | 108 | 20 5 | 6 | 12 | 2 | 42 | 1 | | 2 | 6 | 13 |
| Middle Atlantic | 395 | 5 15 | 31 | 55 | 4 | 164 | 1 | 39 | 10 | 24 | 51 |
| Midwest | 395 737 | 44 | 51 52 | 103 | 11 | 287 | 5 | | 15 | 35 | 96 |
| East North Central | | | | | | | 4 | | | | |
| West North Central | 524 213 | 28 16 | 34 18 | 77 25 | 6 4 | 208 79 | 1 | | 11 4 | 27 9 | 68 27 |
| South | | | | | | | | | | | |
| | 1,278 | 33 | 242 | 153 | 28 | 449 | 12 | | 18 | 55 25 | 134 |
| South Atlantic | 717 | 20 | 124 | 85 | 19 | 258 | 7 | | 11 | 35 | 71 |
| East South Central | 171 | 6 | 23 | 22 | 3 | 63 | 1 | 24 | 2 | 5 | 21 |
| West South Central | 390 | 8 | 96 | 46 | 6 | 128 | 3 | 43 | 5 | 14 | 41 |
| West | 519 | 18 | 66 25 | 61 | 7 | 200 | 3 | | 19 | 28 | 64 |
| Mountain | 191 | 7 | 25 | 23 | 2 | | Q | | Q 13 | 8 | 22 |
| Pacific | 329 | 11 | 41 | 38 | 5 | 122 | 2 | 35 | 13 | 20 | 42 |

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

| Three | | | | | | | | | | | | | |
|---|--------------------------------|-------|-------|-----|----------|-----------|---------|-------------|----------|--------|-----|----------|--|
| Name | | | | | Total El | ectricity | Consump | tion (trill | ion Btu) | | | | |
| Climate Zone: 30-Year Average Under 2,000 CDD and - | | Total | Heat- | | | Heat- | • | | _ | Equip- | | Other | |
| Under 2,000 CDD and - | All Buildings* | 3,037 | 115 | 397 | 384 | 52 | 1,143 | 22 | 354 | 64 | 148 | 357 | |
| More than 7,000 HDD | Climate Zone: 30-Year Average | | | | | | | | | | | | |
| 5,500-7,000 HDD 763 44 55 98 11 309 6 88 16 39 97 4,000-5,499 HDD 567 22 58 69 8 230 3 61 18 31 66 Fewer than 4,000 HDD 748 16 113 94 17 275 6 93 14 33 87 Copocity Copolity 680 9 149 62 11 172 5 53 7 27 53 Number of Floors Number of Floors Two 689 25 88 98 16 254 5 70 18 32 28 18 125 70 18 32 28 18 12 18 32 40 4 13 23 41 72 716 33 41 72 72 22 42 28 18 41 72 25 | , | | | | | | | | | | | | |
| 4,000-6,499 HDD | | | | | | | | | | | | | |
| Fewer than 4,000 HDD | | | | | | | | | | | | | |
| 2,000 CDD or More and - Fewer than 4,000 HDD | | | | | | | | | | | | | |
| Number of Floors | | 748 | 16 | 113 | 94 | 17 | 2/5 | 6 | 93 | 14 | 33 | 87 | |
| Den | , | 549 | 9 | 149 | 62 | 11 | 172 | 5 | 53 | 7 | 27 | 53 | |
| Den | Number of Floors | | | | | | | | | | | | |
| Two 689 | | 1.140 | 50 | 155 | 110 | 23 | 384 | 13 | 230 | 17 | 34 | 125 | |
| Four to Nine | Two | | | | | | | | | | | 85 | |
| Four to Nine | | | | | | | | | | | | | |
| Elevators and Escalators | | 595 | 16 | 81 | 99 | 6 | 240 | 2 | 25 | 13 | 41 | 72 | |
| (more than one may apply) Any Elevators | Ten or More | 327 | 10 | 41 | 38 | 4 | 152 | 1 | 8 | 9 | 25 | 38 | |
| Any Elevators | | | | | | | | | | | | | |
| Number of Elevators | `, | 4 404 | 40 | 400 | 004 | 40 | 504 | _ | | 00 | 00 | 400 | |
| One 354 13 47 61 6 134 1 20 7 22 42 Two to Five 585 22 79 89 7 234 2 22 19 43 70 Six or More 481 10 68 70 5 214 2 12 12 31 57 Any Escalators 193 5 32 30 2 80 Q 4 Q 11 22 Number of Workers (main shift) Fewer than 5 372 18 39 28 7 119 3 92 3 5 57 5 to 9 248 12 31 21 6 78 4 56 4 6 31 10 to 19 303 17 40 31 8 103 5 52 5 9 35 50 to 10 99 403 16 55 67 7 </td <td></td> <td>1,421</td> <td>46</td> <td>193</td> <td>221</td> <td>18</td> <td>581</td> <td>5</td> <td>53</td> <td>38</td> <td>96</td> <td>169</td> | | 1,421 | 46 | 193 | 221 | 18 | 581 | 5 | 53 | 38 | 96 | 169 | |
| Two to Five | | 254 | 12 | 47 | 61 | 6 | 124 | 1 | 20 | 7 | 22 | 42 | |
| Six or More | | | | | | | | | | | | | |
| Number of Workers (main shift) | | | | | | | | | | | | | |
| Fewer than 5 | Any Escalators | | | | | | | | | | | 22 | |
| 5 to 9 248 12 31 21 6 78 4 56 4 6 31 10 to 19 303 17 40 31 8 103 5 52 5 9 35 20 to 49 524 18 71 69 9 191 4 67 14 21 59 50 to 99 403 16 55 67 7 151 2 37 8 19 41 100 to 249 460 16 67 68 8 188 2 27 9 25 49 250 or More 727 18 95 100 7 313 2 22 20 63 85 Weekly Operating Hours Fewer than 40 90 5 17 7 1 22 1 12 1 2 22 40 to 48 397 22 66 42 6 133 1 33 10 25 | Number of Workers (main shift) |) | | | | | | | | | | | |
| 10 to 19 | Fewer than 5 | 372 | | 39 | | | | | | | | | |
| 20 to 49 | | | | 31 | | | | | | | | | |
| 50 to 99 403 16 55 67 7 151 2 37 8 19 41 100 to 249 460 16 67 68 8 188 2 27 9 25 49 250 or More 727 18 95 100 7 313 2 22 20 63 85 Weekly Operating Hours Fewer than 40 90 5 17 7 1 22 1 12 1 2 22 40 to 48 397 22 66 42 6 133 1 33 10 25 60 49 to 60 598 23 83 71 7 229 2 50 15 34 84 61 to 84 497 19 62 67 9 184 4 64 9 24 55 85 to 167 523 16 54 77 9 167 9 119 5 22 44 Open Continuous | | | | | | | | | | | | | |
| 100 to 249 460 16 67 68 8 188 2 27 9 25 49 250 or More 727 18 95 100 7 313 2 22 20 63 85 Weekly Operating Hours Fewer than 40 90 5 17 7 1 22 1 12 1 2 22 40 to 48 397 22 66 42 6 133 1 33 10 25 60 49 to 60 598 23 83 71 7 229 2 50 15 34 84 61 to 84 497 19 62 67 9 184 4 64 9 24 55 85 85 to 167 9 119 5 22 44 Open Continuously 932 30 116 119 20 408 4 76 23 41 93 Ownership and Occupancy Nongoverment Owned 2,300 <td></td> | | | | | | | | | | | | | |
| Weekly Operating Hours Veekly Operating Hours Fewer than 40 90 5 17 7 1 22 1 12 1 2 22 40 to 48 397 22 66 42 6 133 1 33 10 25 60 49 to 60 598 23 83 71 7 229 2 50 15 34 84 61 to 84 497 19 62 67 9 184 4 64 9 24 55 85 to 167 523 16 54 77 9 167 9 119 5 22 44 Open Continuously 932 30 116 119 20 408 4 76 23 41 93 Ownership and Occupancy Nongovernment Owned 2,300 91 280 224 38 897 19 319 54 102 276 Owner Occupied 1,086 38 136 116 16 424 5 135 28 51 138 Nonowner Occupied 1,205 52 144 108 22 471 < | | | | | | | | | | | | | |
| Weekly Operating Hours Fewer than 40 90 5 17 7 1 22 1 12 1 2 22 40 to 48 397 22 66 42 6 133 1 33 10 25 60 49 to 60 598 23 83 71 7 229 2 50 15 34 84 61 to 84 497 19 62 67 9 184 4 64 9 24 55 85 to 167 523 16 54 77 9 167 9 119 5 22 44 Open Continuously 932 30 116 119 20 408 4 76 23 41 93 Ownership and Occupancy Nongovernment Owned 2,300 91 280 224 38 897 19 319 54 102 276 | | | | | | | | | | | | | |
| Fewer than 40 90 5 17 7 1 22 1 12 1 2 22 40 to 48 397 22 66 42 6 133 1 33 10 25 60 49 to 60 598 23 83 71 7 229 2 50 15 34 84 61 to 84 497 19 62 67 9 184 4 64 9 24 55 85 to 167 523 16 54 77 9 167 9 119 5 22 44 Open Continuously 932 30 116 119 20 408 4 76 23 41 93 Completely Acant 9 32 30 116 119 20 408 4 76 23 41 93 Completely Acant 9 2 24 38 | 250 or More | 727 | 18 | 95 | 100 | / | 313 | 2 | 22 | 20 | 63 | 85 | |
| 40 to 48 | , . | 00 | 5 | 17 | 7 | 1 | 22 | 1 | 12 | 1 | 2 | 22 | |
| 49 to 60 598 23 83 71 7 229 2 50 15 34 84 61 to 84 497 19 62 67 9 184 4 64 9 24 55 85 to 167 523 16 54 77 9 167 9 119 5 22 44 Open Continuously 932 30 116 119 20 408 4 76 23 41 93 Owner Schip and Occupancy Nongovernment Owned 2,300 91 280 224 38 897 19 319 54 102 276 Owner Occupied 1,086 38 136 116 16 424 5 135 28 51 138 Nonower Occupied 1,205 52 144 108 22 471 14 184 25 51 134 Unoccupied 8 Q Q (*) Q 2 (*) Q Q Q | | | | | | | | | | | | | |
| 61 to 84 | | | | | | | | | | | | | |
| 85 to 167 | | | | | | | | | | | | | |
| Open Continuously 932 30 116 119 20 408 4 76 23 41 93 Ownership and Occupancy Nongovernment Owned 2,300 91 280 224 38 897 19 319 54 102 276 Owner Occupied 1,086 38 136 116 16 424 5 135 28 51 138 Nonowner Occupied 1,205 52 144 108 22 471 14 184 25 51 134 Unoccupied 8 Q Q (*) Q 2 (*) Q <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<> | | | | | | | | | | | | | |
| Nongovernment Owned 2,300 91 280 224 38 897 19 319 54 102 276 Owner Occupied 1,086 38 136 116 16 424 5 135 28 51 138 Nonowner Occupied 1,205 52 144 108 22 471 14 184 25 51 134 Unoccupied 8 Q Q (*) Q 2 (*) Q | | | | | | | | | | | | 93 | |
| Owner Occupied 1,086 38 136 116 16 424 5 135 28 51 138 Nonowner Occupied 1,205 52 144 108 22 471 14 184 25 51 134 Unoccupied 8 Q Q (*) Q 2 (*) Q Q Q 4 Government Owned 737 24 117 160 14 246 3 35 10 47 81 Federal 131 2 13 24 (*) 63 Q 3 2 5 19 State 204 3 25 53 3 62 (*) 9 3 Q 24 Local 402 19 79 83 11 120 3 23 5 21 38 Vacancy Status Completely Vacant 9 Q Q | | | | | | | | | | | | | |
| Nonowner Occupied 1,205 52 144 108 22 471 14 184 25 51 134 Unoccupied 8 Q Q (*) Q 2 (*) Q Q Q 4 Government Owned 737 24 117 160 14 246 3 35 10 47 81 Federal 131 2 13 24 (*) 63 Q 3 2 5 19 State 204 3 25 53 3 62 (*) 9 3 Q 24 Local 402 19 79 83 11 120 3 23 5 21 38 Vacancy Status 2 9 Q Q (*) Q 3 Q Q Q Q Q Q Q Q Q Q Q Q Q Q | • | | | | | | | | | | | | |
| Unoccupied 8 Q Q (*) Q 2 (*) Q | | | | | | | | | | | | | |
| Government Owned | | | | | | | | | | | | | |
| Federal 131 2 13 24 (*) 63 Q 3 2 5 19 State 204 3 25 53 3 62 (*) 9 3 Q 24 Local 402 19 79 83 11 120 3 23 5 21 38 Vacancy Status Completely Vacant 9 Q Q (*) Q 3 Q Q Q Q Q 5 Mostly Vacant Q <td></td> | | | | | | | | | | | | | |
| State 204 3 25 53 3 62 (*) 9 3 Q 24 Local 402 19 79 83 11 120 3 23 5 21 38 Vacancy Status 2 Completely Vacant 9 Q Q (*) Q 3 Q Q Q Q 5 Mostly Vacant Q | | | | | | | | | | | | | |
| Local 402 19 79 83 11 120 3 23 5 21 38 Vacancy Status Completely Vacant 9 Q Q Q 3 Q Q Q Q 5 Mostly Vacant Q </td <td></td> | | | | | | | | | | | | | |
| Completely Vacant | | | | | | | | | | | | 24 38 | |
| Completely Vacant | Vacancy Status | | | | | | | | | | | | |
| Mostly Vacant Q | • | 9 | O | O | (*) | O | 3 | C | O | O | O | 5 | |
| Partially Vacant 575 25 76 68 7 240 2 30 13 42 74 | | | | | | | | | | | | Q | |
| · | | | | | | | | | | | | 74 | |
| | Not At All Vacant | 2,446 | 89 | 320 | 315 | 45 | 899 | 20 | 324 | 51 | 107 | 277 | |

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

| · | | - | - | - | | | | | | | |
|--|--------------|-----------------------|--------------|------------------|-----------------------|---------------|--------------|--------------------|--------------------------|----------------|------------|
| | | | | Total El | ectricity | Consump | otion (trill | ion Btu) | | | |
| | Total | Space Heat- ing | Cool- ing | Venti- lation | Water Heat- ing | Light- ing | Cook- ing | Refrig- eration | Office Equip- ment | Com- puters | Other |
| All Buildings* | 3,037 | 115 | 397 | 384 | 52 | 1,143 | 22 | 354 | 64 | 148 | 357 |
| Number of Establishments | | | | | | | | | | | |
| One | 2,138 | 82 | 272 | 272 | 43 | 790 | 19 | 290 | 42 | 87 | 242 |
| 2 to 5 | 502 | 16 | 67 | 64 | 5 | 199 | 2 | | 12 | 24 | 64 |
| 6 to 10 | 115 | 5 | 15 | 14 | 2 | 43 | ` ' | | 3 | Q | 13 |
| 11 to 20 More than 20 | 98 174 | 5 5 | 15 29 | 12 22 | 1 2 | 37 72 | (*) (*) | | 2 5 | 7 15 | 13 20 |
| Currently Unoccupied | 9 | Q | Q | (*) | Q | 3 | | | | Q | 5 |
| Predominant Exterior Wall Material | | | | | | | | | | | |
| Brick, Stone or Stucco | 1,507 | 58 | 208 | 207 | 31 | 530 | | | 30 | 73 | 176 |
| Concrete (Block or Poured) Concrete Panels | 530 399 | 19 9 | 72 50 | 62 46 | 9 4 | 202 185 | 4 | 72 22 | Q 10 | 18 28 | 60 43 |
| Siding or Shingles | 150 | 9 | 17 | 14 | 4 | 49 | | | 3 | 6 | 18 |
| Metal Panels | 297 | 12 | 24 | 35 | 3 | 120 | | | 4 | 11 | 42 |
| Window Glass | 67 | 3 | 11 | 7 | 1 | 25 | (*) | 2 | 2 | 6 | 9 |
| Other | 63 | 3 | 10 | 7 | (*) | 25 | | | 1 | 4 | 7 |
| No One Major Type | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q |
| Predominant Roof Material | 4.044 | 00 | 4.40 | 404 | 47 | 405 | | 407 | 00 | | 4.47 |
| Built-Up Shingles (Not Wood) | 1,041 413 | 30 19 | 143 50 | 134 41 | 17 13 | 405 134 | 8 4 | | 23 9 | 57 15 | 117 50 |
| Metal Surfacing | 392 | 18 | 47 | 48 | 7 | 150 | Q | | 5 | 13 | 55 |
| Synthetic or Rubber | 890 | 37 | 116 | 126 | 12 | 329 | | | 22 | 53 | 99 |
| Slate or Tile | 104 | 4 | 16 | 11 | 2 | 34 | 1 | 17 | 2 | 4 | 12 |
| Wooden Materials | 37 | 2 | 6 | 4 | 1 | 14 | Q | | 1 | 1 | 4 |
| Concrete | 99 | Q | 11 | Q | 1 | Q | Q (*) | | 1 | 3 | 13 |
| Other No One Major Type | 41 20 | Q Q | 6 3 | 3 4 | Q Q | 22 6 | (*) Q | | (*) (*) | 1 Q | 4 3 |
| Renovations in Buildings Constructed Before 1980 (more than one may apply) Any Type of Renovation | | | | | | | | | | | |
| Since 1980 | 780 | 30 | 85 | 112 | 14 | 298 | 5 | | 15 | 42 | 90 |
| Addition or Annex | 315 | 13 | 35 | 55 | 5 | 121 | 3 | | 4 | 14 | 35 |
| Reduction In Floorspace | 52 600 | 2 | 5 | 9 | Q | 22 230 | (*) | | 1 | 3 | 7 |
| Cosmetic Improvements Wall or Roof Replacement | 347 | 23 12 | 64 38 | 84 53 | 11 7 | 140 | 4 2 | | 12 7 | 33 22 | 68 39 |
| Interior Wall Re-Configuration | 401 | 15 | 44 | 61 | 5 | 162 | 2 | 32 | 8 | 24 | 49 |
| HVAC Equipment Upgrade | 527 | 21 | 59 | 81 | 9 | 206 | | | 11 | 32 | 60 |
| Lighting Upgrade | 478 | 18 | 50 | 75 | 7 | 184 | | | 10 | 28 | 55 |
| Window Replacement | 251 | 9 | 23 | 37 | 4 | 100 | 2 | | 5 | 16 | 29 |
| Plumbing System Upgrade | 314 | 10 | 32 | 50 | 5 | 129 | | | 5 | 19 | 36 |
| Insulation Upgrade | 174 | 6 | 20 | 30 2 | 2 | 64 | | | 3 | 11 | 21 2 |
| Other Renovation No Renovations Since 1980 | 16 647 | 1 22 | 1 78 | 87 | Q 10 | 7 246 | | | (*) 12 | 1 26 | 85 |
| Building Newer than 1980 | 1,609 | 62 | 234 | 185 | 29 | 599 | | | 36 | 80 | 182 |
| Energy Sources (more than one may apply) | | | | | | | | | | | |
| Electricity | 3,037 | 115 | 397 | 384 | 52 | 1,143 | | | | 148 | 357 |
| Natural Gas Fuel Oil | 2,161 854 | 62 29 | 269 109 | 295 121 | 30 12 | 842 359 | | | 43 24 | 108 51 | 256 102 |
| District Heat | 335 | 29 | 109 | 69 | 3 | 359 147 | | 43 12 | 24 5 | 29 | 102 42 |
| District Chilled Water | 192 | 2 | 16 | 49 | 2 | 68 | | | 3 | Q | 23 |
| Propane | 339 | 9 | 36 | 40 | 5 | 141 | 2 | 51 | 5 | 9 | 40 |
| Other | 77 | 2 | 8 | 14 | 1 | 30 | (*) | 6 | Q | 4 | 10 |

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

| - | | | | - | | | | | | | | |
|---|--------------|--|--------------|------------------|-----------------------|---------------|--------------|--------------------|--------------------------|----------------|-----------|--|
| | | Total Electricity Consumption (trillion Btu) | | | | | | | | | | |
| | Total | Space Heat- ing | Cool- ing | Venti- lation | Water Heat- ing | Light- ing | Cook- ing | Refrig- eration | Office Equip- ment | Com- puters | Other | |
| All Buildings* | 3,037 | 115 | 397 | 384 | 52 | 1,143 | 22 | 354 | 64 | 148 | 357 | |
| Space-Heating Energy Sources | | | | | | | | | | | | |
| Electricity | 1,553 | 115 | 225 | 155 | 37 | 571 | 12 | | 36 | 70 | 168 | |
| Electricity Main Electricity Secondary | 907 646 | 92 23 | 151 74 | 68 87 | 28 9 | 303 267 | | 111 53 | 21 15 | 37 33 | 88 80 | |
| Other Excluding Electricity | | (*) | 152 | 221 | 14 | 543 | | 171 | 26 | 76 | 177 | |
| Buildings without Heating | 93 | (*) | 20 | 8 | 1 | 29 | | 19 | 1 | 2 | 11 | |
| Primary Space-Heating Energy Source | | | | | | | | | | | | |
| Electricity | 907 | 92 | 151 | 68 | 28 | 303 | 8 | 111 | 21 | 37 | 88 | |
| Natural Gas | 1,565 | 19 | 192 | 219 | 18 | 620 | | 179 | 34 | 75 | 197 | |
| Fuel Oil | 77 | 1 | 6 | 13 | 1 | 29 | ` , | 13 | 1 | 4 | 9 | |
| District Heat | 310 | 2 | 21 | 65 | 3 | 135 | | 11 | 4 | 27 | 40 | |
| Propane Other | 70 16 | 1 Q | 7 1 | 9 2 | 1 (*) | 18 7 | | | Q Q | Q Q | 10 2 | |
| | 10 | Q | ' | 2 | () | , | () | 2 | Q | Q | 2 | |
| Cooling Energy Source ^b | | | | | | | | | | | | |
| Electricity | 2,776 | 110 | 397 | 326 | 50 | 1,032 | | 335 | 61 | 126 | 318 | |
| Other Excluding Electricity | | Q 4 | (*) | 42 | 2 1 | 63 | ٠, | 6 | 3 1 | Q 2 | 19 20 | |
| Buildings without Cooling | 104 | 4 | (*) | 15 | Į. | 48 | (*) | 14 | ļ | 2 | 20 | |
| Water-Heating Energy Source | | | | | | | _ | | | | | |
| Electricity | 1,373 | 72 | 196 | 142 | 52 | 487 | 9 | 157 | 33 | 66 | 159 | |
| Other Excluding Electricity Bldgs without Water Heating | 1,519 144 | 38 4 | 186 16 | 228 15 | (*) (*) | 593 63 | 13 Q | | 29 2 | 79 3 | 174 24 | |
| | | | | | | | | | | | | |
| Cooking Energy Source Electricity | 848 | 37 | 117 | 125 | 21 | 294 | 22 | 103 | 14 | 36 | 78 | |
| Other Excluding Electricity | | 15 | 76 | 78 | 8 | 193 | | 81 | 9 | 18 | 52 | |
| Buildings without Cooking | | 63 | 205 | 181 | 23 | 656 | | 170 | 41 | 93 | 227 | |
| Energy End Uses (more than one may apply) | | | | | | | | | | | | |
| Buildings with Space Heating | 2,944 | 115 | 377 | 376 | 51 | 1,113 | 21 | 335 | 63 | 146 | 346 | |
| Buildings with Cooling | | 111 | 397 | 369 | 52 | 1,095 | 22 | | 63 | 147 | 337 | |
| Buildings with Water Heating | 2,892 | 110 | 382 | 370 | 52 | 1,080 | 22 | | 62 | 145 | 333 | |
| Buildings with Cooking | | 51 | 193 | 203 | 30 | 487 | 22 | | 23 | 55 | 130 | |
| Buildings with Manufacturing Buildings with Electricity | 141 | 4 | 9 | 17 | Q | 64 | Q | 10 | 2 | 6 | 25 | |
| Generation | 890 | 30 | 117 | 129 | 13 | 367 | 4 | 42 | 28 | 56 | 103 | |
| Percent of Floorspace Heated | | | | | | | | | | | | |
| Not Heated | 93 | (*) | 20 | 8 | 1 | 29 | 1 | 19 | 1 | 2 | 11 | |
| 1 to 50 | 187 | 6 | 14 | 18 | 4 | 69 | | | Q | 4 | 25 | |
| 51 to 99 | 395 | 14 | 49 | 49 | 7 | 152 | 3 | 54 | 6 | 16 | 46 | |
| 100 | 2,361 | 95 | 314 | 309 | 41 | 892 | 17 | 242 | 49 | 127 | 275 | |
| Percent of Floorspace Cooled | 40: | | /#-> | 4- | | 4.0 | 1,4.3 | | | _ | 22 | |
| Not Cooled | 104 | 4 15 | (*) | 15 56 | 1 7 | 48 105 | ` ' | | 1 | 2 | 20 | |
| 1 to 50 51 to 99 | 444 746 | 15 29 | 23 93 | 56 97 | 11 | 195 273 | | | 5 13 | 12 38 | 63 82 | |
| 100 | 1,744 | 67 | 281 | 215 | 34 | 627 | | | 45 | 96 | 191 | |

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

| | Total Electricity Consumption (trillion Btu) | | | | | | | | | | | |
|---|--|-----------------------|--------------|------------------|-----------------------|---------------|--------------|--------------------|--------------------------|----------------|----------|--|
| | Total | Space Heat- ing | Cool- ing | Venti- lation | Water Heat- ing | Light- ing | Cook- ing | Refrig- eration | Office Equip- ment | Com- puters | Other | |
| All Buildings* | 3,037 | 115 | 397 | 384 | 52 | 1,143 | 22 | 354 | 64 | 148 | 357 | |
| Percent Lit When Open | | | | | | | | | | | | |
| Zero | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | |
| 1 to 50 | 225 | 12 | 32 | 29 | 6 | 63 | 2 | | Q | 6 | 40 | |
| 51 to 99 | 894 | 34 | 116 | 125 | 16 | 328 | 5 | | 21 | 58 | 104 | |
| 100 | 1,901 | 68 | 248 | 230 | 31 | 747 | 15 | | 35 | 85 | 207 | |
| Building Never Open/ | ., | | | | ٠. | | | | | | _0. | |
| Electricity Not Used | 12 | Q | 1 | (*) | Q | 4 | Q | 1 | Q | Q | 6 | |
| Percent Lit When Closed | | | | | | | | | | | | |
| Zero | 543 | 21 | 71 | 69 | 7 | 173 | 4 | 74 | 10 | 30 | 84 | |
| 1 to 50 | 1,407 | 58 | 195 | 181 | 23 | 487 | 13 | | 29 | 72 | 169 | |
| 51 to 100 | 155 | 5 | 16 | 14 | Q | 75 | 13 | | 2 | 5 | 11 | |
| Building Never Closed/ | 100 | 3 | .0 | | ×. | , 5 | ' | 27 | _ | 3 | | |
| Electricity Not Used | 932 | 30 | 116 | 119 | 20 | 408 | 4 | 76 | 23 | 41 | 93 | |
| Heating Equipment (more than one may apply) | | | | | | | | | | | | |
| Heat Pumps | 523 | 27 | 87 | 53 | 13 | 201 | 4 | 46 | 12 | 25 | 55 | |
| Packaged Heat Pumps | 359 | 18 | 61 | 33 | 8 | 141 | 2 | | 9 | 17 | 37 | |
| Split-System Heat Pumps | 136 | 6 | 23 | 18 | 4 | 51 | Q | 11 | 2 | 5 | 15 | |
| Individual Room Heat Pumps | 148 | 8 | 25 | 17 | 5 | 60 | 1 | 7 | 2 | 8 | 14 | |
| Furnaces | 761 | 35 | 78 | 84 | 13 | 287 | 6 | 123 | 13 | 27 | 95 | |
| Individual Space Heaters | 563 | 37 | 61 | 65 | 11 | 225 | 2 | 61 | 10 | 26 | 66 | |
| District Heat | 317 | 2 | 22 | 66 | 3 | 139 | 1 | 11 | 4 | 28 | 40 | |
| Boilers | 1,009 | 27 | 126 | 168 | 13 | 405 | 4 | 59 | 24 | 56 | 126 | |
| | 1,009 | 51 | 156 | 119 | 21 | 383 | 10 | 134 | 24 | 47 | 112 | |
| Packaged Heating Units Other | 1,056 | 10 | 21 | 20 | 3 | 64 | 10 | 18 | 3 | 8 | 20 | |
| Cooling Equipment (more than one may apply) Residential-Type Central Air Conditioners | 455 | 19 | 58 | 67 | 11 | 158 | 4 | 59 | 8 | 15 | 56 | |
| Heat Pumps | 547 | 26 | 91 | 55 | 13 | 209 | 4 | 54 | 12 | 25 | 58 | |
| Packaged Heat Pumps | 360 | 18 | 59 | 32 | 8 | 142 | 2 | 36 | 9 | 17 | 38 | |
| Split-System Heat Pumps | 139 | 5 | 24 | 19 | 4 | 50 | Q | 13 | 2 | 5 | 16 | |
| Individual Room Heat Pumps | 171 | 8 | 30 | 19 | 5 | 68 | 1 | 11 | 3 | 8 | 17 | |
| | | | | | | | _ | | 7 | | | |
| Individual Air Conditioners District Chilled Water | 479 192 | 20 2 | 63 16 | 62 49 | 13 2 | 196 68 | 3 1 | 44 7 | 3 | 18 Q | 53 23 | |
| Central Chillers | 836 | 22 | 122 | 140 | 10 | 338 | 3 | | 24 | 50 | 99 | |
| Packaged Air Conditioning | 030 | 22 | 122 | 140 | 10 | 330 | 3 | 21 | 24 | 30 | 99 | |
| 5 | 1,578 | 64 | 216 | 179 | 27 | 595 | 14 | 205 | 30 | 72 | 176 | |
| Units Swamp Coolers | - | 2 | 9 | | | | 14 | | | | | |
| Other | 75 75 | 3 | 11 | 9 10 | 2 (*) | 28 28 | (*) | | 1 1 | 2 4 | 9 8 | |
| Main Equipment Replaced Sinc 1990 (more than one may apply | | | | | | | | | | | | |
| Heating | 716 | 36 | 91 | 84 | 16 | 258 | 6 | 83 | 17 | 37 | 88 | |
| Cooling | 976 | 41 | 124 | 120 | 19 | | 7 | | 23 | 55 | 114 | |
| Water Heating Equipment | | _ | | | _ | | | | | | | |
| Centralized System | 1,759 | 68 | 219 | 227 | 31 | 630 | 16 | | 35 | 79 | 204 | |
| Distributed System | 483 | 20 | 75 | 54 | 10 | 179 | 3 | 52 | 9 | 23 | 58 | |
| Combination of Centralized | | | | | | | | | | | | |
| and Distributed System | 651 | 22 | 88 | 88 | 12 | 271 | 3 | 34 | 19 | 43 | 71 | |

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

| | | - | | | | | | | | | |
|--|--|-----------------------|--------------|------------------|-----------------------|---------------|--------------|--------------------|--------------------------|----------------|------------|
| | Total Electricity Consumption (trillion Btu) | | | | | | | | | | |
| | Total | Space Heat- ing | Cool- ing | Venti- lation | Water Heat- ing | Light- ing | Cook- ing | Refrig- eration | Office Equip- ment | Com- puters | Other |
| All Buildings* | 3,037 | 115 | 397 | 384 | 52 | 1,143 | 22 | 354 | 64 | 148 | 357 |
| Lighting Equipment Types (more than one may apply) | | | | | | | | | | | |
| Incandescent | 2,006 | 75 | 257 | 257 | 34 | 803 | 17 | | 44 | 105 | 222 |
| Standard Fluorescent | 2,951 | 111 | 388 | 378 | 50 | 1,103 | 22 | | 63 | 147 | 345 |
| Compact Fluorescent | 1,665 | 61 | 220 | 238 | 27 | 652 | 12 | | 40 | 88 | 189 |
| High Intensity Discharge | 1,126 | 36 | 131 | 170 | 16 | 472 | 5 | | 22 | 61 | 130 |
| Halogen | 1,069 | 40 | 132 | 139 | 18 | 453 | 8 | | 22 | 50 | 114 |
| Other | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q |
| Refrigeration Equipment (more than one may apply) | | | | | | | | | | | |
| Any Refrigeration | 2,771 | 104 | 359 | 350 | 49 | 1,030 | 22 | | 59 | 137 | 307 |
| Commercial Refrigeration | 1,788 | 61 | 237 | 236 | 32 | 651 | 21 | 283 | 28 | 70 | 169 |
| Walk-In Units | 1,489 | 48 | 196 | 198 | 27 | 539 | 20 | | 22 | 56 | 133 |
| Cases or Cabinets | 1,441 | 48 | 193 | 185 | 24 | 522 | 17 | | 23 | 54 | 135 |
| Residential-Type Units | 1,769 1,985 | 71 67 | 236 261 | 236 275 | 31 31 | 681 784 | 9 | | 34 45 | 98 110 | 212 219 |
| Vending Machines No Refrigeration | 266 | 11 | 39 | 34 | 4 | 112 | Q | | 45 5 | 110 | 50 |
| No reingeration | 200 | | 33 | 04 | 7 | 112 | Q | () | 3 | | 30 |
| Office Equipment (more than one may apply) | | | | | | | | | | | |
| Computers | 2,838 | 107 | 377 | 370 | 48 | 1,077 | 19 | | 63 | 148 | 328 |
| With Flat Screen Monitors | 1,589 | 57 | 213 | 223 | 22 | 614 | 8 | | 46 | 109 | 187 |
| Dedicated Servers | 2,035 | 74 | 272 | 279 | 30 | 797 | 9 | | 57 | 124 | 230 |
| Laser Printers | 1,550 | 65 | 208 | 197 | 27 | 569 | 11 | 182 | 38 | 76 | 177 |
| Inkjet Printers | 1,820 | 61 | 251 | 242 | 29 | 717 | 9 | | 39 | 102 | 211 |
| FAX Machines Photocopiers | 2,701 2,361 | 100 83 | 359 321 | 352 327 | 45 35 | 1,036 928 | 18 9 | | 62 60 | 142 136 | 310 276 |
| Filotocopiers | 2,301 | 03 | 321 | 321 | 33 | 920 | 9 | 107 | 00 | 130 | 210 |
| Number of Computers | | | | | | | | | | | |
| None | 199 | 8 | 20 | 14 | 4 | 66 | 3 | | 1 | (*) | 29 |
| 1 to 4 | 523 | 26 | 58 | 45 | 14 | 166 | 9 | | 5 | 5 | 60 |
| 5 to 9 | 274 | 14 | 39 | 28 | 4 | 102 | 2 | | 4 | 6 | 35 |
| 10 to 19 | 285 | 11 | 39 | 33 | 5 | 108 | 1 | 40 | 5 | 9 | 35 |
| 20 to 49 | 408 | 13 | 54 | 56 | 6 | 161 | Q | | Q | 16 | 50 |
| 50 to 99 100 to 249 | 259 368 | 9 | 38 54 | 38 61 | 5 6 | 108 | 1 1 | 11 | 6 7 | 14 25 | 29 41 |
| 250 or More | 722 | 15 19 | 96 | 109 | 8 | 142 291 | 2 | 16 21 | 22 | | 79 |
| | | | | | · | _0. | _ | | | | |
| Number of Dedicated Servers | | | | | | | | | | | |
| None | 1,002 | 41 | 125 | 105 | 23 | 346 | 13 | | 7 | | 127 |
| 1 to 4 | 1,166 | 50 | 159 | 156 | 20 | 451 | 5 | | 17 | 48 | 131 |
| 5 to 9 | 250 | 7 | 36 | 40 | 4 | 100 | Q | | 6 | 17 | 28 |
| 10 to 19 | 216 | 5 | 25 | 35 | 2 | 83 | (*) | | 5 | 23 | 25 |
| 20 to 49 50 or More | 183 219 | 5 7 | 32 20 | 26 23 | 2 | 71 92 | 1 Q | | 6 22 | 14 21 | 21 25 |
| 30 01 WIDE | 219 | 1 | 20 | 23 | 2 | 92 | Q | , | 22 | ۷۱ | 20 |
| Number of Photocopiers | | | | | | | | | | | |
| None | 676 | 32 | 77 | 57 | 18 | 215 | 13 | | 4 | 12 | 81 |
| One | 593 | 26 | 73 | 66 | 10 | 224 | 3 | | 9 | 16 | 74 |
| 2 to 4 | 706 | 25 | 100 | 104 | 12 | 270 | 3 | | 19 | 34 | 80 |
| 5 to 9 | 323 | 11 | 45 | 52 | 5 | 121 | 1 | | 8 | 29 | 37 |
| 10 or More | 738 | 21 | 103 | 105 | 8 | 312 | 2 | 21 | 25 | 56 | 85 |

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

| | | - | - ' | - | | | | | | | |
|---|----------------|-----------------------|--------------|------------------|-----------------------|---------------|--------------|--------------------|--------------------------|-----------|------------|
| | | | | Total El | ectricity (| Consump | otion (trill | ion Btu) | | | |
| | Total | Space Heat- ing | Cool- ing | Venti- lation | Water Heat- ing | Light- ing | Cook- ing | Refrig- eration | Office Equip- ment | Com- | Other |
| All Buildings* | 3,037 | 115 | 397 | 384 | 52 | 1,143 | 22 | 354 | 64 | 148 | 357 |
| Energy-Related Space Function | าร | | | | | | | | | | |
| (more than one may apply) Commercial Food Preparation | 1,376 | 51 | 193 | 203 | 30 | 486 | 22 | 184 | 23 | 55 | 130 |
| Activities with Large Amounts of Hot Water | 1,167 | 46 | 158 | 174 | 27 | 463 | 12 | | 18 | 50 | 120 |
| Separate Computer Area | 1,550 | 54 | 219 | 232 | 23 | 615 | 6 | 85 | 45 | 101 | 169 |
| HVAC Conservation Features (more than one may apply) | | | | | | | | | | | |
| Variable Air-Volume System | 1,267 | 45 | 181 | 176 | 19 | 498 | 7 | | 35 | 85 | 151 |
| Economizer Cycle HVAC Maintenance | 1,408 2,703 | 51 98 | 182 362 | 206 360 | 21 46 | 556 1,030 | 7 20 | | 37 59 | 91 137 | 161 310 |
| Energy Management and | | | | | | | | | | | |
| Control System (EMCS) | 954 | 30 | 142 | 160 | 14 | 368 | 4 | 40 | 27 | 61 | 108 |
| Window and Interior Lighting Features (more than one | | | | | | | | | | | |
| may apply) Multipaned Windows | 2,024 | 87 | 244 | 263 | 34 | 774 | 16 | 222 | 46 | 98 | 239 |
| Tinted Window Glass | 1,682 522 | 56 | 235 | 221 | 24 | 663 | 10 | | 41 | 95 | 202 |
| Reflective Window Glass External Overhangs | 522 | 20 | 77 | 71 | 8 | 211 | 2 | 33 | 11 | 29 | 60 |
| or Awnings | 961 | 37 | 120 | 121 | 19 | 339 | 11 | 140 | 25 | 47 | 101 |
| Skylights or Atriums Daylighting Sensors | 645 206 | 20 6 | 81 29 | 96 30 | 8 2 | 273 79 | 3 1 | 35 12 | 20 Q | 33 12 | 75 23 |
| Specular Reflectors | 1,487 | 52 | 195 | 207 | 23 | 596 | 9 | 113 | 34 | 81 | 177 |
| Electronic Ballasts Energy Management and Control System (EMCS) | 2,498 | 91 | 335 | 336 | 41 | 937 | 17 | 262 | 56 | 132 | 291 |
| For Lighting | 311 | 10 | 47 | 44 | 4 | 125 | 1 | 15 | Q | 19 | 35 |
| Equipment Usage Reduced When Building Not In Full Use (more than one may apply) | | | | | | | | | | | |
| Heating | 1,930 | 73 | 255 | 262 | 33 | 717 | 14 | | 49 | 101 | 233 |
| Cooling | 2,031 | 74 | 281 | 275 | 36 | 755 | 15 | | 45 | 111 | 241 |
| Lighting Office Equipment | 2,006 721 | 81 29 | 270 107 | 255 97 | 31 13 | 693 258 | 17 5 | | 40 13 | 104 26 | 251 92 |
| Annual Consumption (kilowatthours) | | | | | | | | | | | |
| 10,000 or Less | 13 | (*) | 1 | 1 | (*) | 4 | (*) | 2 | (*) | (*) | 4 |
| 10,001 to 50,000 | 153 | 8 | 19 | 10 | 2 | 55 | (*) | | 3 | 5 | 29 |
| 50,001 to 100,000 | 176 | 8 | 22 | 14 | 4 | 55 | 1 | 35 | 4 | 6 | 27 |
| 100,001 to 500,000 | 715 | 35 | 84 | 72 | 16 | 228 | 10 | | 14 | 27 | 81 |
| 500,001 to 1,000,000 1,000,001 to 5,000,000 | 331 917 | 14 34 | 51 124 | 44 145 | 10 14 | 115 347 | 3 4 | | 5 16 | 13 55 | 33 100 |
| Over 5,000,000 | 732 | 16 | 95 | 99 | 7 | 338 | 2 | | 21 | 42 | 83 |
| | | | | | | | | | | | |

Table E3. Electricity Consumption (Btu) by End Use for Non-Mall Buildings, 2003

| | Total Electricity Consumption (trillion Btu) | | | | | | | | | | | |
|---|--|-----------------------|--------------|------------------|-----------------------|---------------|--------------|--------------------|--------------------------|----------------|-----------|--|
| | Total | Space Heat- ing | Cool- ing | Venti- lation | Water Heat- ing | Light- ing | Cook- ing | Refrig- eration | Office Equip- ment | Com- puters | Other | |
| All Buildings* | 3,037 | 115 | 397 | 384 | 52 | 1,143 | 22 | 354 | 64 | 148 | 357 | |
| Provider of Purchased Electricity (more than one may apply) Local Utility | 2,700 308 | 104 9 | 347 44 | 340 42 | 49 3 | 1,007 122 | 21 1 | 329 25 | 53 Q | 131 16 | 319 35 | |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

(http://www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed tables 2003/detailed tables 2003.html).

(*)=Value rounds to zero in the units displayed.

Q=Data withheld because fewer than 20 buildings were sampled for any cell, or because the Relative Standard Error (RSE) was greater than 50 percent for a cell in the "Total" column.

Notes: • Due to rounding, data may not sum to totals. • HVAC = Heating, Ventilation, and Air Conditioning.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

^{*} Figures in this table do not include enclosed malls and strip malls. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

^a Totals in the "Electricity," "Electricity Secondary," and "Other Excluding Electricity" rows have been revised and values do not match published values in consumption Table C13

^b Totals in the "Electricity" and "Other Excluding Electricity" rows have been revised and do not match published value in consumption Table C13.