

RESIDENTIAL

| | Product Information | Engineering Data |
|--|---------------------|------------------|
| RESIDENTIAL CONSTRUCTION FEATURES | 7 | |
| FLOOR REGISTERS & GRILLES | | |
| 210 Steel (Floor) Register | 8 | 108 |
| 265 Steel (Floor) Return Grille | 8 | 108 |
| 411 Steel (Floor) Diffuser | 8 | 108 |
| 420 Steel Toe-Space Grille | 9 | 109 |
| 421 Steel (Floor) Diffuser | 9 | 109 |
| 531 Aluminum (Floor) Diffuser | 9 | 109 |
| BASEBOARD REGISTERS & GRILLES | | |
| 405 Steel (Baseboard) Diffuser, 18" | 10 | 110 |
| 406 Steel (Baseboard) Diffuser, 15" or 18" | 10 | 110 |
| 407 Steel (Baseboard) Return Grille | 10 | |
| 462 Steel (Baseboard) Diffuser | 10 | 110 |
| 472 Steel (Baseboard) Return Grille | 10 | 110 |
| 464 Steel (Baseboard) Diffuser | 11 | 110 |
| 474 Steel (Baseboard) Return Grille | 11 | 110 |
| 654 Steel (Baseboard) Register | 11 | 110 |
| 655 Steel (Baseboard) Register | 12 | 110 |
| 657 Steel (Baseboard) Return Grille | 12 | 110 |
| 658 Steel (Baseboard) Return Grille | 12 | 110 |
| 664 Steel (Baseboard) Register | 13 | 110 |
| 674 Steel (Baseboard) Return Grille | 13 | 115 |
| SIDEWALL REGISTERS & GRILLES | | |
| 3 Steel Sidewall Stud Frame | 14 | |
| 301 (A301) Steel (Stamped Aluminum) Curved Blade One-Way | 14 | 111 |
| 302 (A302) Steel (Stamped Aluminum) Curved Blade Two-Way | 15 | 111 |
| 303 (A303) Steel (Stamped Aluminum) Curved Blade Three-Way | 15-16 | 111 |
| 304 (A304) Steel (Stamped Aluminum) Curved Blade Four-Way | 16 | 111 |
| 300M Series Stamped Curved-Blade Register with Multi-Louver Damper | 17 | 111 |
| A611 Stamped Aluminum Curved Blade Register One-Way, MS/OB | 18 | 112 |
| A612 Stamped Aluminum Curved Blade Register Two-Way, MS/OB | 18 | 112 |
| A613 Stamped Aluminum Curved Blade Register Three-Way, MS/OB | 18 | 112 |
| A614 Stamped Aluminum Curved Blade Register Four-Way, MS/OB | 19 | 112 |
| A618 Stamped Aluminum Straight Blade Register, MS/OB | 19 | 113 |
| 621 Stamped Steel Four-Way Register | 20 | 113 |
| 631 Stamped Steel Three-Way Register | 20 | 113 |
| 650 (A650) Stamped Steel/Aluminum Return Grille | 20-21 | 114 |
| 651 Stamped Steel Register | 21 | 114 |
| 659 Stamped Steel Filter Grille | 21 | 114 |
| 661 (A661) Stamped Steel/Aluminum Two-Way Register | 22 | 115 |
| 672 Stamped Steel Return Grille | 23 | 115 |
| 673 Stamped Steel Filter Grille | 23 | 115 |
| 681 Stamped Steel One-Way Register | 23 | 116 |
| 682 Stamped Steel Two-Way Register | 24 | 116 |
| 683 Stamped Steel Three-Way Register | 24 | 116 |
| 684 Stamped Steel Four-Way Register | 24 | 116 |
| 680M Series Stamped Lanced-Blade Register with Multi-Louver Damper | 25 | 116 |

RESIDENTIAL

| | Product Information | Engineering Data |
|--|---|----------------------|
| REZZIN™ REGISTERS & DIFFUSERS | | |
| RZ682 | Rezzin™ Plastic Sidewall/Ceiling Register, Double Deflection | 26 117 |
| RZ683 | Rezzin™ Plastic Sidewall/Ceiling Register, Three-Way Deflection | 26 117 |
| RZ684 | Rezzin™ Plastic Sidewall/Ceiling Diffuser | 26 117 |
| RZSRT | Rezzin™ Plastic T-Bar Directional Diffuser | 27 118 |
| RZMCDST | Rezzin™ Plastic T-Bar Modular Core Diffuser | 27 118-119 |
| RZBP | Rezzin™ Plastic Back Panel | 27 |
| RZSR | Rezzin™ Plastic Square-to-Round Back Panel | 27 |
| RZ421 | Rezzin™ Plastic Two-Way Register | 28 120 |
| RZ500 | Rezzin™ Plastic Square Ceiling Diffuser | 28 120 |
| RZ16 | Rezzin™ Plastic Round Ceiling Diffuser | 28 120 |
| LAUNDRY CHUTE DOORS (LCD) | | 29 |
| CEILING DIFFUSERS | | |
| 11 | Steel Duct Ring | 30 |
| 12 | Steel Butterfly Damper with Ring | 30 |
| 16 | Steel Round (Ceiling) Diffuser | 30 120 |
| 21 | Steel Square Mounting Frame | 31 |
| 22 | Steel Butterfly Damper with Mounting Frame | 31 |
| 23 | Steel Opposed Blade Damper | 31 |
| 24 | Steel Square (Ceiling) Diffuser | 32 120 |
| A501 | Aluminum Square Diffuser One-Way, MS/OB | 32 121 |
| A502 | Aluminum Square Diffuser Two-Way, MS/OB | 32 121 |
| A503 | Aluminum Square Diffuser Three-Way, MS/OB | 33 121 |
| A504 | Aluminum Square Diffuser Four-Way, MS/OB | 33 121 |
| A505 | Aluminum Square Diffuser Four-Way Corner, MS/OB | 33 121 |
| A500P | T-Bar Panel for A500 Series | 34 |
| SD/SDD | Aluminum Square Step-Down Diffuser | 34 122 |
| ECFM | Aluminum Evaporative Cooler Diffuser | 34 122 |
| ECBX | Steel Box Diffuser | 35 122 |
| ECSD/ECSDD | Steel Step-Down Diffuser | 35 122 |
| ECHVD | Evaporative Cooler Diffuser | 35 122 |
| SUNDRY | | |
| | Damper Regulator Sets | 36-37 |
| | Furnace Accessories | 38 |

LIGHT COMMERCIAL

| | Product Information | Engineering Data |
|---|--|----------------------|
| LIGHT COMMERCIAL CONSTRUCTION FEATURES | | |
| | | 39 |
| REGISTERS & GRILLES—STEEL | | |
| 821 | Vertical Single Deflector, w/MS | 40 123-124 |
| 831 | Horizontal Single Deflector, w/MS | 40 123-124 |
| 92HVO | Double Deflector Horizontal Face | 41 123-124 |
| 92HVV | Double Deflector Horizontal Face, w/OB | 41 123-124 |
| 92VHO | Double Deflector Vertical Face | 42 123-124 |
| 92VHV | Double Deflector Vertical Face, w/OB | 42 123-124 |
| 94 | Return Horizontal | 43 125 |

LIGHT COMMERCIAL

| | | Product Information | | Engineering Data |
|--------------|-----------------------------------|------------------------|-------|---------------------|
| 94HOV | Return Horizontal, w/OB | .43 | ..... | .125 |
| 94A | Return Horizontal Deflected | .44 | ..... | .125 |
| 94AHOV | Return Horizontal Deflected, w/OB | .44 | ..... | .125 |
| 96AFB | Steel Fixed-Bar Filter Grille | .44 | ..... | .125 |
| 98VOH/98VOHP | Supply Grille With Deflectors | .45 | ..... | .123-124 |
| 9200V | Opposed-Blade Damper | .45 | | |

REGISTERS & GRILLES—ALUMINUM

| | | | | |
|----------|--|-----|-------|----------|
| HX | Horizontal Single Deflector | .46 | ..... | .126-127 |
| HD | Horizontal Single Deflector, w/OB | .46 | ..... | .126-127 |
| HM | Horizontal Single Deflector, w/MS | .47 | ..... | .126-127 |
| HV | Double Deflector Horizontal Face | .47 | ..... | .126-127 |
| HVD | Double Deflector Horizontal Face, w/OB | .48 | ..... | .126-127 |
| VX | Vertical Single Deflector | .48 | ..... | .126-127 |
| VD | Vertical Single Deflector, w/OB | .49 | ..... | .126-127 |
| VM | Vertical Single Deflector, w/MS | .49 | ..... | .126-127 |
| VH | Double Deflector Vertical Face | .50 | ..... | .126-127 |
| VHD | Double Deflector Vertical Face, w/OB | .50 | ..... | .126-127 |
| CH1 | Curved Blade One-Way Horizontal | .51 | ..... | .128 |
| CHD1 | Curved Blade One-Way Horizontal, w/OB | .51 | ..... | .128 |
| CHM1 | Curved Blade One-Way Horizontal, w/MS | .51 | ..... | .128 |
| CH2 | Curved Blade Two-Way Horizontal | .52 | ..... | .128 |
| CHD2 | Curved Blade Two-Way Horizontal, w/OB | .52 | ..... | .128 |
| CHM2 | Curved Blade Two-Way Horizontal, w/MS | .52 | ..... | .128 |
| C3 | Curved Blade Three-Way Horizontal | .53 | ..... | .129 |
| CD3 | Curved Blade Three-Way Horizontal, w/OB | .53 | ..... | .129 |
| CM3 | Curved Blade Three-Way Horizontal, w/MS | .53 | ..... | .129 |
| C4 | Curved Blade Four-Way Horizontal | .54 | ..... | .130 |
| CD4 | Curved Blade Four-Way Horizontal, w/OB | .54 | ..... | .130 |
| CM4 | Curved Blade Four-Way Horizontal, w/MS | .54 | ..... | .130 |
| CH2CL | Two-Way Corner, Down and Left | .55 | ..... | .128 |
| CH2CR | Two-Way Corner, Down and Right | .55 | ..... | .128 |
| RCB/RCBD | Curved Blade Return, w/OB | .56 | ..... | .131 |
| RCBF | Curved Blade Filter Grille | .56 | ..... | .131 |
| RE5 | ½" Grid Core Return | .57 | ..... | .132 |
| RED5 | ½" Grid Core Return, w/OB | .57 | ..... | .132 |
| REF5 | ½" Grid Filter Grille | .58 | ..... | .132 |
| RH45 | Fixed Horizontal Deflected | .58 | ..... | .131 |
| RHD45 | Fixed Horizontal Deflected, w/OB | .59 | ..... | .131 |
| RHF45 | Fixed Horizontal Deflected Filter Grille | .59 | ..... | .131 |
| RH90 | Fixed Horizontal Return Grille | .60 | ..... | .132 |
| RHD90 | Fixed Horizontal Return Grille, w/OB | .60 | ..... | .132 |
| TG/TGF | Transfer Grille and Frame | .61 | ..... | .133 |

LIGHT COMMERCIAL

| | Product Information | Engineering Data |
|------------------------------------|--|-------------------------|
| CEILING DIFFUSERS—STEEL | | |
| 20 | Round Adjustable | .62133 |
| 18 | Duct Ring | .62 |
| 19 | Round OB Damper | .63 |
| SRE | Directional, Extended Frame | .64134-139 |
| SRS | Directional, Step Frame | .64134-139 |
| SR6 | Control Grid | .65 |
| SR7 | OB Damper | .65 |
| SR/AR | Air Patterns and Listed Sizes | .68 |
| CEILING DIFFUSERS—ALUMINUM | | |
| ARE | Directional, Extended Frame | .66134-139 |
| ARF | Directional, Flush Frame | .66134-139 |
| ARS | Directional, Step Frame | .67134-139 |
| AR6 | Control Grid | .67 |
| AR7 | OB Damper | .67 |
| SR/AR | Air Patterns and Listed Sizes | .68 |
| ASRE | Supply/Return, Extended Frame | .69140-141 |
| ASRS | Supply/Return, Step Frame | .69140-141 |
| MCD/MCDD | Modular Diffuser (OB Option), Extended Frame | .70-71142-143 |
| MCDS/MCSD | Modular Diffuser (OB Option), Step Frame | .70-71142-143 |
| | T-Bar Panel | .71142-143 |
| SPIRAL DIFFUSERS | | |
| SV | Single-Deflection Diffuser | .72146 |
| SVH | Double-Deflection Diffuser | .72146 |
| USV | Single-Deflection Universal Diffuser | .72146 |
| USVH | Double-Deflection Universal Diffuser | .73146 |
| SS | Linear Face Diffuser | .73144-145 |
| LINEAR & SLOT DIFFUSERS | | |
| | L Series | .74-76147-148 |
| | S Series | .77-81149-152 |
| DP | Distribution Plenum | .81 |
| LOUVERS | | |
| DL | Drum Louver | .82153-154 |
| BV | Brick/Block Vents | .83 |
| 1530 | Stationary Louvers | .84155 |
| 1545 | Stationary Louvers | .84155 |
| 245 | Stationary Louvers | .85155 |
| 445 | Stationary Louvers | .85155 |
| 4ABC | Adjustable Louver | .85155 |

T-BAR GRILLES & DIFFUSERS

| | Product Information | Engineering Data |
|--|---------------------|------------------|
| T-BAR CONSTRUCTION FEATURES | .86 | |
| T-BAR RETURN AIR FILTER GRILLES | | |
| 659T Steel—Lanced Face | .87 | .156 |
| 659TI Steel—Lanced Face with Fiberglass Back | .87 | .156 |
| 673T Steel—Filter Grille | .87 | |
| 673TPI R6 Steel—Filter Grille with Steel Plenum, R6 Insulation | .88 | |
| Molded Fiberglass Back Features | .88 | |
| 96AFBT Steel—Fixed-Bar Face | .88 | .156 |
| 96AFBTI Steel—Fixed-Bar Face with Fiberglass Back | .89 | .156 |
| RHF45T Extruded Aluminum—Fixed Bar Face | .89 | .156 |
| RCBFT Extruded Aluminum—Curved Blade Face | .89 | |
| REF5T Extruded Aluminum—½" Core Grid Face | .90 | .156 |
| REF5TI Extruded Aluminum—½" Core Grid Face with Insulation | .90 | .156 |
| PFT Steel—Perforated Face | .90 | .156 |
| PFTI Steel—Perforated Face with Fiberglass Back | .90 | .156 |
| T-BAR RETURN AIR GRILLES | | |
| 94AT Steel—Fixed-Bar Face | .91 | |
| RH45T Extruded Aluminum—Fixed-Bar Face | .91 | .156 |
| RCBT Extruded Aluminum—Curved-Blade Face | .91 | |
| RE5T Extruded Aluminum—½" Core Grid Face | .92 | .156 |
| RE5TI Extruded Aluminum—½" Core Grid Face with Fiberglass Back | .92 | .156 |
| T-BAR SURFAIRE/RENOVATOR DIFFUSER | | |
| 441, 442, 443, 444, 445 Aluminum—One-Piece Stamped Face | .93 | .156 |
| REN4 Aluminum—One-Piece Stamped Face with Fiberglass Back | .93 | .156 |
| RENPS Steel—Perforated Face with Deflector | .94 | .157 |
| ARENPS Aluminum—Perforated Face with Fiberglass Back | .94 | .157 |
| RENP Steel—Perforated Face | .94 | .158 |
| T-BAR FIXED-PATTERN DIFFUSER | | |
| DPD Steel—Detachable Plate Diffuser Fixed Collar | .94 | .157 |
| DPD R6 Steel—Detachable Plate Diffuser Fixed Collar with Insulation | .94 | .157 |
| HVS Steel—Square Three-Core Face Adjustable Collar with Insulation Blanket | .95 | .157 |
| HVS R6 Steel—Square Three-Core Face Adjustable Collar with R6 Insulation | .95 | .157 |
| FPD/AFPDP Steel—Square Two-Core Face Fixed Collar | .95 | .157 |
| FPD3 Steel—Square Three-Core Face Fixed Collar | .95 | .157 |
| FPD3 R6 Steel—Fixed-Pattern Diffuser with Insulation | .95 | |
| T-BAR PERFORATED SUPPLY/RETURN | | |
| CBPS Steel—Perforated Face with Curved Blade Deflector | .96 | .159-160 |
| CBPR Steel—Perforated Face | .96 | .160 |
| SCBPS Steel—Stamped Curved-Blade Perforated Supply Diffuser | .96 | .160 |
| FBCS Steel—Stamped Curved Blade with Fiberglass Back | .97 | |
| FBR Steel—Stamped Curved Blade | .97 | |
| SBP Steel—Perforated Face Shallow Back | .97 | .158 |
| RFPS Steel—Perforated Face with Directional Deflector | .98 | .157 |
| RFPR Steel—Perforated Face | .98 | .158 |
| PDS/PDSD Steel—Perforated Face with Fixed and Adjustable Deflector | .98-99 | .157 |
| PDR Steel—Perforated Face | .99 | .158 |
| PD Perforated Face Only | .99 | .158 |
| PDF Perforated Face with Frame | .99 | |

T-BAR GRILLES & DIFFUSERS

| | | Product Information | Engineering Data |
|---|---|------------------------|---------------------|
| T-BAR DIRECTIONAL/MODULAR DIFFUSER | | | |
| ART | Extruded Aluminum—Square Neck | 100 | 134-139 |
| SRT | Steel—Square Neck | 100 | 134-139 |
| SRET/SRET R6 | Ceiling Diffuser | 100 | |
| MCDST | Extruded Aluminum—Curved-Blade Face | 101 | 142-143 |
| MCDSDT | Extruded Aluminum—Curved-Blade Face with Damper | 101 | 142-143 |
| A500P | Steel—Panel Extruded Aluminum Face | 102 | |
| ECBXT | Steel—With Adjustable Damper | 102 | 143 |
| T-BAR ACCESSORIES | | | |
| 6400 | Tab Collar | 102 | |
| 5400 | Snap-In Collar Ring | 103 | |
| 5400PP | Push Pins | 103 | |
| 3800 | Adjustable Butterfly Damper | 104 | |
| T19 | Steel—Multi-Blade Damper | 104 | |
| RD | Radial Blade Damper | 104 | |
| SMF | Extruded Aluminum—Surface Mount Frame | 104 | |
| SR | Galvanized Steel—Square-to-Round Transition | 104 | |
| P Panel | Filler Panel | 105 | |
| MISCELLANEOUS | | | |
| AD | Damper | 105 | |
| VN | Vane | 105 | |
| RA | Rail | 105 | |
| DT | Air Diverter | 106 | |
| FT | Flexiturn | 106 | |
| APF | Aluminum Plaster Frame | 106 | |
| 6100 | Access Door | 106 | |

ENGINEERING DATA

| | |
|--------------------------|---------|
| Engineering Data | 107-165 |
| Suggested Specifications | 166 |
| Glossary of Terms | 167 |

Residential Registers, Grilles & Diffusers

No one satisfies the demands for air distribution solutions better than Hart & Cooley. Our wide selection of registers, grilles, diffusers, and accessories includes a variety of shapes and sizes to meet any application and budget requirement.

Products are offered in steel, aluminum or plastic construction, and are designed for installation ease. They are made with an attention to detail that contributes to unmatched performance.

For example: an electro-deposition paint finish creates a flawless appearance; stamped face margins eliminate mitered corners and rough edges; each product is identified with a unique bar code label; and shrink-wrap packaging makes sure products are delivered in perfect condition. The wide variety of fin spacings, air patterns, and damper controls assures an appropriate solution for each application.

A nationwide distribution network provides for consistent product availability and timely delivery.