
#### Abstract

AbOUT LUKJAN Lukjan Metal Products has been manufacturing and selling high quality sheet metal pipe, duct and fittings to the Wholesale HVAC Industry since 1964. Lukjan has two manufacturing facilities: its flagship 330,000 square foot plant in Conneaut, Ohio and its newer addition, a 250,000 square foot production facility in Kings Mountain, NC. Together, Lukjan is able to service HVAC Wholesalers in over twenty states. Lukjan remains a family owned and operated business following these guiding principles established by its founders, Anatol and Natalia Lukjanczuk: Provide the best quality product at competitive prices backed by exceptional customer service. These same principles live on today in all aspects of our business under the leadership of Dan Lukjanczuk and Elena Lukjanczuk-Kelly.




## ORDERING/SCHEDULING

Customers can place orders via fax, email, phone, or via EDI. Orders are typically filled within 5-10 business days. Please inquire regarding regular delivery schedules.

## FREIGHT ALLOWANCE

Freight allowance is determined based on delivery frequency, order volume, product mix and location. Please contact Lukjan customer service or your sales representative for information regarding freight allowance for your account.

## BOX QUANTITIES/CATALOG PRICING

Please contact Lukjan customer service or our website www.Lukjan.com for a complete listing of all Lukjan product codes, product list prices and box quantities. Ordering full box quantities helps us provide you the most competitive prices and facilitates product handling.

## DAMAGED GOODS

Product received in damaged conditioned can be returned for full credit. Customers have up to 5 days from the product delivery date to contact customer service and arrange for an RMA (Return Memo Authorization) and schedule pick-up of defective material. Credit will be issued upon inventory of returned goods.

## RETURNS AND RESTOCKING

Lukjan will, at its discretion, accept returns for credit provided the product is in resalable condition and is a standard part. Custom made metal products will not be accepted. All returns are subject to a minimum $\mathbf{2 0 \%}$ restocking and handling fee. Some restock charges may be higher depending on the specific product volume.

## METAL SHIPPING RACKS

Lukjan utilizes both 4' and 8' metal shipping racks for high volume duct and pipe purchases. A summary of our rack policy is as follows:

1. Racks are provided as a "free" service to our wholesalers/distributors for the handling and storage of Lukjan product.
2. Racks NOT returned within a reasonable timeframe will be invoiced to the wholesaler/distributor of record.
3. Racks sent to customer sites are the responsibility of the wholesaler/distributor of record.
4. Direct ship racks are invoiced to the wholesaler/distributor of record on shipment.
5. Racks are currently valued at $\$ \mathbf{1 5 0 . 0 0}$ (4) and $\$ 250.00$ ( $8^{\prime}$ ) and may change based on prevailing replacement costs.
Customers are asked to contact Lukjan customer service to arrange pick-up when racks are cleared. Customers are asked to neatly stack cleared racks and provide safe and easy access for Lukjan drivers.

## ELECTRONIC DATA INTERCHANGE (EDI)

Lukjan utilizes EDI for ordering, acknowledgement and invoicing. Any customer interested in utilizing EDI can contact our customer service team or their Lukjan sales representative.

## ELECTRONIC INFORMATION

Lukjan asks, as a business courtesy, that any electronic data provided by Lukjan to its customers (pricing, product specifications, etc.) be managed in a confidential manner.

## DISCOUNTS/TERMS

Please inquire regarding discount programs for early payments.

## PACKING SLIP/INVOICE

Items on Lukjan Packing Slips and Invoices match the sequential order of the customer purchase order and if requested, can include the customer part number providing easy product receiving and billing reconciliation.

## PRODUCT IDENTIFICATION

Lukjan provides box lableing that includes a product bar code, product description, customer name/address, customer PO\#, order date, customer part number and PO sequence number.

## PRODUCT CODES/PRICING

All items in the Lukjan Catalog are identified with the Lukjan Product Code (RB30) and it's older Catalog Code (L575). The Product Code is defined for each item to provide an accurate means to price and order product. A complete catalog price list of over 10,000 items is available on-line at www.lukjan.com.

## Example:

RP05xxyyzzz RP050630060 6" 30GA 5' Round Pipe, Unboxed

Where: RP05 = Round Pipe, Unboxed
$x x=06$ Pipe Diameter
yy $=30$ Gauge
$z z z=060$ Length

Discounted Catalog Multiplier $=0$. $\qquad$
Effective Date: $\qquad$

LUKJAN RESERVES THE RIGHT TO MAKE ADJUSTMENTS AND/OR CHANGES TO POLICIES, PRICES AND PRODUCT AVAILABILITY AT ITS DISCRETION WITHOUT NOTICE.

## PRODUGT INDEX

| DESCRIPTION | CODE | PG. | DESCRIPTION | CODE | PG. | DESCRIPTION | CODE | PG. | DESCRIPTION | CODE | PG. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ADJ. ANGLE DB TAKEOFF | T095 | 12 | DUCTBOARD COLLAR W/DAMPER | DX38 | 12 | OVAL TO ROUND BOOT, ELBOW | OB75 | 16 | SPIRAL ECCENTRIC REDUCER | RX44 | 20 |
| ADJ. ELBOW DB TAKEOFF | T094 | 12 | ECONO DAMPER 1 HRD-A | RX35 | 15 | OVAL TO ROUND BOOT, END | OB71 | 16 | SPIRAL REGISTER SADDLE | RX65 | 20 |
| ADJUSTABLE ANGLE | RX50 | 9 | ECONO DAMPER 1 HRD-U | RX36 | 15 | OVAL TO ROUND BOOT, STRAIGHT | OB72 | 16 | SPIRAL REGISTER SADDLE W/ADH | RX64 | 20 |
| ADJUSTABLE DUCT HANGERS | DX20 | 22 | ECONO DAMPER 2 HRD-A | RX37 | 15 | OVAL TOE KICK BOOT | OB95 | 17 | SPIRAL SADDLE FLUE W/45 TO | RX60 | 20 |
| ADJUSTABLE ELBOW | RX53 | 9 | ECONO DAMPER 2 HRD-U | RX38 | 15 | OVAL TOP TAKEOFF | 0x60 | 17 | SPIRAL SADDLE FLUE W/90 ${ }^{\circ}$ TO | RX61 | 20 |
| ADJUSTABLE ELBOW TAKEOFF | T093 | 10 | END CAPS | DX44 | 4 | OVAL TOP TAKEOFF, DUCTBOARD | 0X62 | 17 | SQ-RD MOBILE HOME BOX | RB55-M | 6 |
| ALUMINUM ANGLE | AX50 | 24 | END CAPS, 2" EXT. | DX45 | 4 | OVAL VERTICAL ANGLE | 0X52 | 16 | SQUARE ADHESIVE TAKEOFF | TA39 | 11 |
| ALUMINUM COLLAR | AX10, AX11 | 24 | FILTER FRAME BOX | CA74 | 6 | OVAL VERTICAL ELBOW | 0X54 | 16 | SQUARE ADJ. ADHESIVE TAKEOFF | TA10 | 11 |
| ALUMINUM DRYER VENTS | AX74 | 22 | FILTER FRAME, WISE | CA72 | 6 | PIPE HANGER | DX14 | 22 | SQUARE ADJ. DUCTBOARD TAKEOFF | T014 | 12 |
| ALUMINUM ELBOW | AX53 | 24 | FILTER FRAMES (1" Filters) | CA20 | 6 | PLENUM CORNERS | PX20 | 7 | SQUARE ADJUSTABLE TAKEOFF | T010 | 10 |
| ALUMINUM FRESH AIR INTAKE | AX64 | 22 | FLARED TEES | RX70 | 14 | PLENUM RAIL | PX16 | 7 | SQUARE ADJUSTABLE TO, ROTH | T016 | 10 |
| ALUMINUM LONG COLLAR | AX12 | 24 | FLEX CONNECTOR | RX58 | 9 | PVC $45^{\circ}$ SADDLE | vX62 | 21 | SQUARE CONICAL ADHESIVE TO | TA38 | 11 |
| ALUMINUM LONG RADIUS ELBOW | AX54 | 24 | FLEXIBLE DUCT CONNECTOR | DX36 | 5 | PVC $90^{\circ}$ SADDLE | vx63 | 21 | SQUARE NON-ADJ. ADHESIVE TO | TA20 | 11 |
| ALUMINUM PIPE | AP01 | 24 | FLUE WYE | RX80 | 14 | PVC ANGLE | vX50 | 21 | SQUARE NON-ADJ. DB TAKEOFF | T018 | 12 |
| ALUMINUM RAIN CAP | AX28 | 24 | FURNACE BOX (OPEN TOP) | CA50 | 6 | PVC COATED STEEL SHEETS | vS01 | 26 | SQUARE SIDE DB TAKEOFF | T039 | 13 |
| ALUMINUM REDUCER | AX41 | 24 | FURNACE SUPPORT BOX | CA40 | 6 | PVC CONNECTOR | vX58 | 21 | SQUARE SIDE TAKEOFF | T038 | 10 |
| ALUMINUM SHEETS | AS01 | 26 | GALV. FRESH AIR INTAKES | CA64 | 22 | PVC ECCENTRIC REDUCER | VX44 | 21 | SQUARE TOP NON-ADJ. TAKEOFF | T050-52 | 10 |
| ALUMINUM TEE | AX70 | 24 | GaLvanized CHIMNEY THIMBLE | RX05 | 26 | PVC ELBOW | vX53 | 21 | SQUARE-ROUND BOOT | RB55 | 6 |
| ALUMINUM TRIM COLLAR | AX09 | 24 | galvanized drawband | RX01 | 26 | PVC END CAP | VX20 | 21 | STACK ADAPTER, ELBOW | SX81 | 19 |
| ANGLE STRIPS | DX18 | 22 | GALVANIZED DRYER VENTS | EX74 | 22 | PVC FLUE WYE | VX80 | 21 | StACK ADAPTER, STRAIGHT | SX80 | 19 |
| BASEMENT BOOT | RB45 | 8 | galvanized rain cap | RX28 | 26 | PVC PERIMETER BOOT | VB70 | 21 | STACK BOOT, ANGLE | SB40 | 18 |
| BLACK ANGLE | BX50 | 25 | GALVANIZED ROOF FLASHING | EX20 | 26 | PVC REGISTER BOOT, ELBOW | VB30 | 21 | STACK BOOT, ELBOW | SB30 | 18 |
| BLACK CAP | BX21, BX22 | 24 | GALVANIZED ROUND PIPE | RP01, RP05 | 5 | PVC REGISTER BOOT, END | VB01 | 21 | Stack boot, end | SB10 | 18 |
| BLACK CAP REDUCER | BX23, BX24 | 42 | GALVANIZED SPIRAL ANGLES | RX50 | 20 | PVC REGISTER BOOT, STRAIGHT | VB20 | 21 | STACK BOOT, STRAIGHT | SB20 | 18 |
| BLACK DRAWBAND | BX01 | 24 | gaLVanized SPIRAL ELBOWS | RX53-GS | 20 | PVC REGISTER SADDLE | VX61 | 21 | STACKHEAD | SX75 | 19 |
| BLACK ELBOW | BX53 | 25 | GALVANIZED SPIRAL END CAPS | RX22 | 20 | PVC SHOE TAP | VX66 | 21 | STACKHEAD, DOUBLE | SX73 | 19 |
| BLACK PIPE | BP01 | 24 | GALVANIZED SPIRAL PIPE | GP01 | 20 | PVC SPIRAL PIPE | VP01 | 21 | STACKHEAD, LONG | SX72 | 19 |
| BLACK STEEL SHEETS | BS01 | 26 | GALVANIZED SPIRAL REDUCER | RX44 | 20 | PVC STARTING COLLAR | VX11 | 21 | Stackhead, LONG W/EARS | SX71 | 19 |
| BLACK TAPERED INCREASER | BX43 | 25 | GALVANIZED STEEL SHEETS | GS01 | 26 | PVC TEE | VX70 | 21 | STACKHEAD, OUT OF WALL | SX74 | 19 |
| BLACK TAPERED REDUCER | BX40, BX41 | 24 | GALVANIZED TRIM COLLAR | RX09 | 26 | PVC TOUCH-UP PAINT | VX90 | 21 | STACKHEAD, RETURN AIR | SX76 | 7 |
| BLACK TEE | BX70 | 25 | HIGH EFFICIENCY OFFSET TO | TA57 | 11 | QUIK-SEAL ROUND PIPE | RP06, RP07 | 5 | StaCKhead, Short | SX70 | 19 |
| BLACK TRIM COLLAR | BX10 | 24 | HORIZONTAL (LONGWAY) ANGLE | DX27 | 4 | RANGE HOOD | SX86 | 26 | Stainless steel adj. angle | NX50 | 25 |
| B00t frame | RB70 | 8 | HORIZONTAL (LONGWAY) ELBOW | DX25 | 4 | RECTANGULAR DUCT | DT01, |  | Stainless steel adj. ELbow | NX53 | 25 |
| B00t RAIL | RB66 | 8 | INSUL. RETURN AIR BOX W/COLLAR | CA60 | 23 |  | DT02, DT03 | 4 | STAINLESS STEEL CAP | NX21 | 25 |
| BRANCH WYE | RX81 | 14 | INSUL. STACKHEAD, RETURN AIR | SX76 | 23 | RECTANGULAR DUCT DAMPERS | DX50 | 5 | Stainless Steel connector | NX58 | 25 |
| BRANCH WYE, DOUBLE ADJ. | RX83 | 14 | INSULATED BOXES | DX46 | 23 | RECTANGULAR NON-ADJ. TAKEOFF | T020 | 10 | Stainless steel drawband | NX01 | 25 |
| BRANCH WYE, SINGLE ADJ. | RX82 | 14 | INSULATED CEILING BOX - ANGLE | RB65 | 23 | RECTANGULAR START COLLAR | DX33 | 4 | Stainless steel rain cap | NX28 | 25 |
| BRIDGE SPEARS | RX95 | 22 | INSULATED CEILING BOX - SIDE | RB61 | 23 | REDUCERETTE | DX79 | 5 | STAINLESS STEEL SHEETS | NS01 | 26 |
| BUTTERFLY DAMPER | RX59 | 15 | INSULATED CEILING BOX - TOP | RB62 | 23 | REDUCING WYE | RX79 | 14 | Stainless steel start collar | NX11 | 25 |
| CAP INCREASER | RX25 | 14 | INSULATED FURNACE BOX | CA50 | 23 | REGISTER BOOT W/CRD | RB10, |  | Stainless steel tee | NX70 | 25 |
| CAP REDUCER | RX23, RX24 | 4 14 | INSULATED FURNACE SUPPORT BOX | CA40 | 23 |  | RB20, RB30 <br> RB40 |  | STAINLESS STEEL TRIM COLLAR | NX10 | 25 |
| CEILING BOOT SIDE | RB60 | 13 | INSULATED PLENUM TOPS | PX18 | 23 | REGISTER BOOT, ANGLE REGISTER BOOT, ELBOW | RB40 <br> RB30 | 8 | STAINLESS TAPERED REDUCER | NX41 | 25 |
| CEILING BOX ANGLE | RB65 | 13 | INSULATED PLENUMS (NO TOP) | PL11 | 23 | REGISTER BOOT, ELBOW | RB30, <br> RB31, RB32 | 8 | Standing "S" CLEATS | DX13 | 4 |
| CEILING BOX SIDE | RB61 | 13 | INSULATED RECTANGULAR DUCT | DT01, |  | REGISTER BOOT, END |  |  | STARTER BASE | CA42 | 6 |
| CEILING BOX TOP | RB62 | 13 |  | DT02, DT03 | 23 | -Reistaboor, end | RB11, RB12 | 8 | STRAPPING COIL | DX16 | 22 |
| COLD AIR FRAMES | CA16 | 7 | JIMMY B00T | Sx96 | 19 | REGISTER BOOT, PERIMETER | RB43 | 8 | SUPPORT BRACKETS | DX17 | 22 |
| COLD AIR GROUND | CA19 | 7 | Joist blockoff | PX06 | 7 | REGISTER BOOT, POOR BOY | RB20 | 8 | SWIVEL TEES | RX71 | 14 |
| COLD AIR RETURN BOOTS | CA12 | 6 | JOIST HEAD | PX07 | 7 | REGISTER BOOT, STRAIGHT | RB20, |  | TABLOC DB COLLAR W/DAMPER | DX39 | 12 |
| COLD AIR RETURN KITS | CA10 | 6 | JOIST HEADER PLATE | PX05 | 7 |  | RB21, RB22 | 8 | TABLOC DUCTBOARD COLLAR | DX77 | 12 |
| CONICAL SPIN-IN TAKEOFF | DX69 | 10 | Joist Panning Sheets | PS40 | 7 | REGISTER PAN | RB50 | 8 | TABLOC LONG STARTING COLLAR |  |  |
| CUSTOM SIZED PLENUMS | PL10 | 7 | LONG CLINCH STARTING COLLAR | RX14 | 9 | RETURN AIR BOX - INSULATED | CA59 | 7 | Tabloclona tar maglar | RX13T | 9 |
| DAMPER CLIPS | HD05 | 15 | LONG RADIUS ELBOW | RX54 | 9 | RETURN AIR BOX - INSULATED | CA59 | 23 | TAPERED INCREASER | RX43 | 14 |
| DAMPER DISK BLANKS | HD06 | 15 | LONG ROTH STARTING COLLAR | RX16 | 9 | RETURN AIR BOX W/COLLAR | CA60 | 7 | tapered reducer | RX40, RX4 | 14 |
| DAMPER EXTENSION KITS | RX30 | 15 | LONG STARTING COLLAR | RX12, RX13 | 9 | RETURN AIR FRAME STRIPS | CA62 | 7 | thru box | RB92 | 8 |
| DAMPER HANDLES | HD04 | 15 | LUKJAN PRODUCT CATALOG | LC01 | 26 | RETURN AIR PAN, NO COLLAR | CA58 | 7 | TOE KICK BOOT W/COLLAR | RB95 | 8 |
| DAMPER HARDWARE KITS | HD01 | 15 | METAL DRAIN PANS | CA30 | 6 | RETURN AIR PAN, NO COLLAR | CA58 | 23 | TOE KICK BOX | RB94 | 8 |
| dAmper tubes | RX39 | 15 | NON-ADJ. DB TAKEOFF W/1" RISE | T054 | 12 | ROUND ADHESIVE TAKEOFF | TA40 | 11 | TOP SQ. ADHESIVE TAKEOFF | TA51 | 11 |
| DAMPER W/ 1 HARDWARE | RX31 | 15 | OFFSET STACK | Sx94 | 19 | ROUND ADJ. ADHESIVE TAKEOFF | TA30 | 11 | TRANSITION | DX82 | 5 |
| DAMPER W/ 2 HARDWARE | RX32 | 15 | OFFSET START COLLAR | DX31 | 4 | ROUND ADJ. DB TAKEOFF | T031 | 12 | triangle box | DX47 | 5 |
| DAMPER WASHERS | HD02 | 15 | OLD STYLE TEES | RX75 | 14 | ROUND ADJ. To, HALF-TAB | T033 | 10 | "U" CHANNELS | DX08 | 22 |
| DAMPER WINGNUTS | HD03 | 15 | OVAL ADAPTER | $0 \times 70$ | 17 | ROUND ADJUSTABLE TAKEOFF | T030 | 10 | UNIVERSAL PLENUM SIDE | PX14 | 7 |
| dB METAL BOOT FACE | CA75 | 13 | OVAL ADHESIVE TAKEOFF | $0 \times 40$ | 17 | ROUND BOOT FRAME | RB71 | 8 | UNIVERSALPLENUM TOPS | PX18 | 7 |
| DB RECT. STARTING COLLAR | DX35 | 13 | OVAL BOOT, ANGLE | 0B40 | 17 | ROUND CONICAL ADHESIVE TO | TA60 | 11 | USER MANUAL HOLDER | CA90 | 7 |
| DB TWIST-IN COLLAR | DX60 | 12 | OVAL BOOT, ELBOW | OB30 | 17 | ROUND END CAP | RX21, RX22 | 9 | VERTICAL (SHORTWAY) ANGLE | DX23 | 4 |
| DB TWIST-IN COLLAR w/SCOOP | DX62-65 | 12 | OVALBOOT, END | 0B10 | 17 | ROUND FLEX CONN | DX36R | 9 | VERTICAL (SHORTWAY) ELBOW | DX21 | 4 |
| double db takeoff | T045 | 13 | OVAL BOOT, STRAIGHT | ов20 | 17 | ROUND SADDLE ADHESIVE TO | TA09 | 11 | WALLSTACK, 2PC. SNAP LOCK | SK01 | 18 |
| double takeoff | T040-42 | 10 | OVAL CAP | $0 \times 21$ | 17 | ROUND SIDE TAKEOFF | T036 | 10 | WALLSTACK CONNECTOR | SX35 | 19 |
| DRIVE CLEATS | DX10 | 4 | OVAL DUCTBOARD START COLLAR | $0 \times 76$ | 17 | ROUND SPIN-IN TAKEOFF | DX70 | 10 | WALLSTACK END CAP | SX44 | 19 |
| DRYER WALL BOXES | EX30 | 22 | OVAL FIRESTOP | $0 \times 90$ | 17 | ROUND SPIN-IN TO W/SCOOP | DX72-75 | 10 | WALLSTACK HORIZONTAL ANGLE | SX27 | 18 |
| DUCT ADAPTER | DX80 | 5 | OVAL HORIZONTAL ANGLE | 0x51 | 16 | ROUND STAINLESS STEEL PIPE | NP01 | 25 | WALLSTACK HORIZONTAL ELBOW | SX25 | 18 |
| DUCT HANGER "L" STYLE | DX19 | 22 | OVAL HORIZONTAL ELBOW | $0 \times 53$ | 16 | ROUND-STACK TRANSFORMER | T080 | 10 | WALLSTACK REVERSE ELBOW | SX24 | 18 |
| duct hanger "Z" STYLE | DX14 | 22 | OVAL PIPE | 0 P 01 | 16 | "S" CLEATS | DX12 | 4 | WALLSTACK SIDE TAKEOFF | SX42 | 18 |
| DUCT HANGER STRIPS | DX15 | 22 | OVAL STACKHEAD | 0x10 | 17 | SHOE TAP | RX66 | 20 | WALLSTACK STARTING COLLAR | SX33 | 18 |
| DUCT REDUCERS | DX41 | 5 | OVAL STACKHEAD, DOUBLE | $0 \times 11$ | 17 | SHORT STARTING COLLAR | RX10, RX11 | 9 | WALLSTACK TOP TAKEOFF | SX41 | 18 |
| DUCT SIZING CALCULATOR | LC02 | 26 | OVAL STACKHEAD, SPLIT | $0 \times 12$ | 17 | SHORT START COLLAR W/RING | RX10R, RX11R |  | WALLSTACK VERTICAL ANGLE | SX23 | 18 |
| DUCTBOARD COLLAR | DX76 | 12 | OVAL START COLLAR | 0x63, 0x64 | 17 | SOLID COIL BOX | PX22 | 7 | WALLSTACK VERTICAL ELBOW | SX21 | 18 |
| DUCTBOARD COLLAR BOX | DX83 | 13 | OVAL TO OVAL REVERSE ELBOW | 0B78 | 16 | SPIRAL CONNECTOR | RX58 | 20 | WELDED COND UNIT BRACKET | EX40 | 26 |

## DUGT AND DUGT FITTINGS

Fittings list DRIVE dimension first, SLIP second while Duct lists SLIP first and DRIVE second.


## RECTANGULAR DUCT

Seam Lock Options:
Buttonlock,E-Lock and Slide Lock Joint Connections: S\&D or THOR
DT01xxyyzz 26GA
DT02xxyyzz 28GA
DT03xxyyzz 24GA
$x x=08-30$ (Slip dimension) $\mathrm{yy}=08,10,12$ (Drive dimension) zz = 33, 36, 48, 60, 96 (Length)
Standard dimensions listed above
Call for special sizes and prices.
Standard is Button Lock with S\&D

## DRIVE CLEATS

## DX10xxyy

xxx = 06-120 (Length)
$y y=28,26,24(G A)$


## "S" CLEATS

DX12xxxyy
xxx = 06-120 (Length)
$y y=28,26,24(G A)$

## STANDING "S" CLEATS

## DX13xyyyzz

x= 1 (1" Hem) or 5 (5/8" Hem)
yyy = 60, 96, 120 (Length)
zz = 24 (GA, Blank = 26)
Example: DX135120 = 5/8" $\times 120^{\prime \prime}$ 26GA


Button Lock


E-Lock
BUTTONLOCK is our standard duct offering providing a strong, tight seam connection.

ELOCK offers the same strength and tight seal but eliminates the raw edge along the longitudinal male seam providing a smooth edge reducing potential worksite or warehouse injuries. The ELOCK also adds rigidity to the duct surface.


VERTICAL (SHORTWAY) ELBOW
DX21yyxx (307)
yy = 08, 10, 12, 14, 16, 20
(Drive dimension)
$x x=08-32$ (Slip dimension)


VERTICAL (SHORTWAY) ANGLE
DX23yyxx (314)
yy $=08,10,12,14$ (Drive dimension) $x x=08-32$ (Slip dimension)


Lukjan can install Turning Vanes on $N / \neq 1 / 2$ any duct fitting. Call for more info.


SQUARE THROAT


ROUND THROAT


HORIZONTAL (LONGWAY) ELBOW
DX25yyxx (525)
yy $=08,10,12,14,16,18,20$ (Drive dimension) $x x=08-32$ (Slip dimension)

HORIZONTAL (LONGWAY)

## ANGLE

DX27yyxx (532)
yy = 08,10,12,14 (Drive dimension) $x x=08-32$ (Slip dimension)

|  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| RACK QUANTITIES |  |  |  |  |
|  | 4 FT. \& 5 FT. DUCT | 8 FT. |  |  |
|  | X 8 | X 10 | X 12 | X 8 |
| 8 | 180 |  |  | 180 |
| 10 | 150 | 90 |  | 150 |
| 12 | 150 | 120 | 120 | 150 |
| 14 | 160 | 120 | 120 | 160 |
| 16 | 120 | 90 | 90 | 120 |
| 18 | 120 | 80 | 80 | 120 |
| 20 | 100 | 80 | 80 | 100 |
| 22 | 100 | 80 | 80 | 100 |
| 24 | 100 | 80 | 80 | 100 |
| 25 | 100 | 80 |  | 100 |
| 26 | 100 |  |  | 100 |
| 28 | 80 |  |  | 80 |
| 30 | 80 |  |  | 80 |
| 32 | 80 |  |  | 80 |

## END CAPS, 2" EXT.

DX45yyxx (512)
yy = 04-12 (Drive dimension)
$x x=08-32$ (Slip dimension)

## END CAPS

DX44yyxx (512)
yy = 04-18 (Drive dimension)
$x x=08-30$ (Slip dimension)


DX31yyxx (519)
yy $=08,10,12$ (Drive dimension) $x x=08-32$ (Slip dimension) Standard offset 3"


## RECTANGULAR START COLLAR

DX33yyxx (520)
yy $=04,06,08,10,12,14,15,18$
(Drive dimension)
$x x=08-32$ (Slip dimension)

## FLEXIBLE DUCT CONNECTOR

DX36yyx
yy $=08-20$ (Drive dimension)
xx = 08-24 (Slip dimension)
Isolates furnace vibration from duct system.


## DUCT REDUCERS

DX41yyxxbbaa (533)
yy $=06-18$ (Drive dimension, larger end) $x x=08-30$ (Slip dimension, larger end) $b b=06-18$ (Drive dimension, smaller) aa $=08-28$ (Slip dimension, smaller) Options: C = Centerline reducer

## RECTANGULAR DUCT DAMPERS

## DX50yyxx

yy = 8, 10, 12 (Drive dimension)
$x x=08-50$ (Slip dimension)

## TRANSITION

DX82yyxx (518)
$x x=08-38$ (Slip dimension) yy = 8, 10, 12 (Drive dimension) Add "D" for Transition with Damper

## DUCT ADAPTER

## DX80aayy (534)

aa $=02,04,06,08,10,12$ (Duct reduction) $y y=8,10,12$ (Drive dimension)
Example: $24 \times 8$ to $18 \times 8$
Need 6" reduction on 8" Drive $=$ DX800608

## TRIANGLE BOX

## DX47xxyyzzaa

$x x=10-24$ (Edge 1 dimension)
$y y=10-24$ (Edge 2 dimension)
$z z=10-24$ (Edge 3 dimension) $\mathrm{aa}=06-24$ (Height) Used in Flexduct distribution systems

## REDUCERETTE

## DX79aayy

aa $=02,04,06,08,10,12$ (Duct reduction)
yy = 8, 10, 12 (Drive dimension)
Example: $24 \times 8$ to $18 \times 8$
Need 6" reduction on 8" Drive $=$ DX790608

## ROUND PIPE

|  | RACK QUANTITIES |  |
| :---: | :---: | :---: |
|  | 5 FT. ROUND PIPE |  |
| DIAM. | UNBOXED | BOXED |
| 3 | 550 |  |
| 4 | 630 | 480 |
| 5 | 480 | 350 |
| 6 | 350 | 250 |
| 7 | 240 | 160 |
| 8 | 200 | 150 |
| 9 | 160 |  |
| 10 | 150 |  |
| 12 | 120 |  |
| 14 | 80 |  |

All sizes 10/Bundle except $3^{\prime \prime}$ at 5/Bundle. 4"- 8" Sizes Boxed or Unboxed.
All Sizes over 8" Unboxed.
Beaded Pipe Available.
3" and 4" 10' section available assembled for extra charge.


QUIK-SEAL ROUND PIPE NEWT
RP06xxyyzzz
RP07xxyyzzz (Unboxed 4"- 8")
xx = 04-16 (Diameter)
$y y=30,26,24$ (GA)
$z z=036,048,060,120$ (Length)


## GALVANIZED ROUND PIPE

RP01xxyyzzz
RP05xxyyzzz (Unboxed 4"- 8")
xx = 03-32 (Diameter)
$y y=31,30,28,26,24,22(G A)$
$z z=012,024,036,048,060,120$ (Length)
Options: Buttonlock and Snaplock
Boxed in 4"-8", A = Assembled for 120" lengths (3 \& 4" only)


## FURNAGE/AIR HANDLER FITTINGS




## CUSTOM SIZED PLENUMS

PL10xxyyzz
$x x=10-28$ (Plenum Width)
yy = 12-30 (Plenum Depth)
zz = 12-60 (Plenum Height)
Standard 4 sides, 1 cap, $x$-broke
Options: Double Top, Two Piece Designs, Flange In/Out, Hem,
Fractional sizes end with A, B, etc.
Example: $16.5 \times 20.5 \times 48=$ PL10162048A
Insulated Plenums available. See page 23

## PLENUM RAIL

PX16xxyy
$x x=10-28$ (Plenum Width)
yyy $=046$ or 056 (Plenum Length)


UNIVERSAL PLENUM SIDE
PX14xxzz
xx = 10-28 (Plenum Width)
$z z=12-60$ (Plenum Height)


USER MANUAL HOLDER CA9001

## PLENUM CORNERS

PX20xxx
xx = 36, 60, 120 (Length)


UNIVERSAL PLENUM TOPS
PX18xxyy
$x x=10-28$ (Plenum Width) yy = 12-36 (Plenum Length)

COLD AIR FRAMES
CA16xxyyzz
$x x=10-40$ (Opening width)
$y y=04-24$ (Opening height) zz = Overall frame width (16" or 24") Standard is $4^{\prime \prime}+$ opening width


SOLID COIL BOX
PX22xxyyzz
$x x=16-24$ (Box Width)
$y y=20-28$ (Box Depth)
$z z=15-22$ (Box Height)

## SUPPLY/RETURN AIR PRODUGTS



SUPPLY/RETURN AIR PAN, NO COLLAR
CA58xxyyzz
$x x=10-24$ (Wdith)
$y y=10-24$ (Length)
$z z=04-16 \quad($ Height, Standard $=4 ")$


SUPPLY/RETURN
AIR BOX - NO COLLAR
CA59xxyyzz No Collar
xx $=10-24$ (Wdith)
yy $=10-24$ (Length)
$z z=10-24\left(\right.$ Height, Standard $\left.=6{ }^{\prime \prime}\right)$
Specify R4, R6, R8 or with Flange (F)


RETURN AIR BOX W/COLLAR
CA60xxyyzz w/Collar
xx =06-24 (Wdith)
yy $=06-24$ (Length)
zz $=06-20$ (Collar diameter)
Standard Height 6 "

## JOIST BLOCKOFF

PX06xxyyzz
$x x=16,36$ (Width)
$y y=10,14$ (Length)
$z z=30,28,26(G A)$

## STACKHEAD, RETURN AIR

SX76xxyyaabb
$x x=14,16,20,25$ (Wall register width) $y y=20,24,25$ (Wall register height) aa $=14,16,20,25$ (Floor opening width) $\mathrm{bb}=10,12$ (Floor opening length) xx = aa typical, Standard RAW edges, specify flange on floor opening


## JOIST HEAD

PX07xxyyzz
$x x=16,36$ (Width)
$y y=10,14$ (Length)
zz = 30, 28, 26 (GA)


## REGISTER BOOT, END

RB10xyyz (L571)
$x=2-12$ (Register height) yy = 06-14 (Register width)
$z=4-10$ (Round opening)
Specify L = Left, R= Right


## REGISTER BOOT, ANGLE

RB40xyyz (L577)
$x=2-8$ (Register height) yy = 10-14 (Register width) $z=4-10$ (Round opening)


## REGISTER BOOT, PERIMETER

RB43xyyz (L580)
$x=2,4$ (Register height)
yy $=10-14$ (Register width)
$z=4-10$ (Round opening)


REGISTER BOOT, STRAICHT RB20xyyz (L572)
$x=2-12$ (Register height) yy = 06-14 (Register width) $z=4-10$ (Round opening)


REGISTER BOOT, POOR BOY

RB20xyyPB
x = 2-6 (Register height) yy = 08-14 (Register width)


## REGISTER PAN

RB50xxyy (516) 5" High RB51xxyy (517) 11" High
$x=04-12$ (Register height)
yy = 10-14 (Register width)


## BOOT FRAME

RB70xxyyzz
xx = 04-12 (Register width)
yy =06-14 (Register length)
zz = 16 or 24 (Frame length)
$24 "$ fits both 16 " and 24 " stud lengths
Stamped design with rounded edges

## ROUND BOOT FRAME

 RB71xxzz$x x=06-12$ (Round opening) zz = 24 (Frame length)


REGISTER BOOT, ELBOW
RB30xyyz (L575)
$x=2-12$ (Register height)
yy $=06-14$ (Register width)
$z=4-10$ (Round opening)


## REGISTER BOOT

 W/INTERGATED UL APPROVED CELIING RADIATION DAMPER \& SHEET ROCK FLANGERB10xyzFSa End RB20xyyzFSa Straight RB30xyyzFSa Elbow
$x=2-12$ (Register height) yy $=$ 06-14 (Register width) $z=04-10$ (Round opening) $\mathrm{a}=3$, 6 (Throat extension) Standard $165^{\circ}$ Link, $212^{\circ}$ available Example: 4x12x6 CRD Elbow Boot w/6" extension RB304126FS6


## TOE KICK BOX

RB94xxy
xx = 02, 03 (Register Height) $y y=10,12$ (Register Length) Open register side only or register side and bottom.


## BASEMENT BOOT

RB45xyyz (PH-1)
$x=4-8$ (Register height)
yy = 10-14 (Register width)
$z=4-8$ (Round opening)


## THRU BOX

RB92xxyyzzaabb
xx = 10 (Register Opening Height) $y y=04$ (Register Opening Width) zz = 12 (Box Depth)
aa $=04-08$ (Collar diameter input)
bb $=04-08$ (Collar diameter output)

## BOOT RAIL

RB66xx
$x x=16,20,24,26$ (Length)


## TOE KICK BOOT W/COLLAR

RB95xyyz
xx =2, 3 (Register Height) $y y=10,12$ (Register Length) zz = 4, 6 (Round collar)
Toe Kick Boot w/Oval Collar OB95 available, see page 17.


## ADJUSTABLE ANGLE

## RX50xxyyz

xx = 03-36 (Diameter)
$y y=30,26,24$ or 22 (GA)
z = 3P (3 piece), 2pc. stndrd


## Shegt Metal Starting collars



SHORT STARTING COLLAR
RX10xx (412) No Crimp RX11xx (413) Crimped xx = 04-40 (Diameter)


## SHORT STARTING COLLAR WITH SOLID RING <br> RX10Rxx (412R) No Crimp RX11Rxx (413R) Crimped xx = 04-40 (Diameter)



TABLOC LONG STARTING COLLAR
RX12Txx (416T)
RX13Txx (416TD)
w/Damper
$x x=04-20$ (Diameter)
Ships nested. Quick tabloc wont release!


## LONG ROTH

STARTING COLLAR
RX16xx (413R)
Medium sized body (4" long) $x x=03-24$ (Diameter)


ROUND END CAP
RX21xxzz (421) No Crimp
RX22xxzz (422) Crimped
xx = 03-24 (Diameter)
$\mathrm{zz}=22,24$ (GA) Blank $=26 \mathrm{GA}$


## FLEX CONNECTOR

RX58xxzz
xx $=03$-24 (Diameter) $\mathrm{zz}=30,26$ (GA)
Used to join short pieces of flex.
 W/WAVEY WASHER RX58Rxx
xx = 03-24 (Diameter)
High-friction couplers allow damper adjustment from register opening.


ROUND FLEX CONNECTOR DX36Rxx
xx = 03-24 (Diameter)
Provides isolation of furnace and air handler vibration and noise from round duct systems.

## SHEET METAL TAKEOFFS AND SPIN-INS



SQUARE ADJUSTABLE TAKEOFF
TO10xx (303) No Damper TO10Dxx (303D) Damper TO10DExx (303DE) Damper Ext Kit
$x x=04-24$ (Diameter)


SQUARE TOP NON-ADJ. TAKEOFF
TO50xx (563) 0" R
TO51xx (564) 1" R TO52xx (565) $2^{\prime \prime}$ R
$x x=04-18$ (Diameter)

DOUBLE TAKEOFF
TO40xx (462) 0" R
TO41xx (463) 1" R
TO42xx (464) 2" R
xx = 04-08 (Diameter)



RECTANGULAR NON-ADJ. TAKEOFF
TO20xx (308)
$x x=04-18$ (Diameter)


ROUND ADJUSTABLE TAKEOFF
TO30xx (325) No Damper TO30Dxx (325D) Damper TO30DExx (325DE) Damper Ext Kit
xx = 04-20 (Round Diameter)
Tabbed opening is 1 "larger than round


SQUARE ADJUSTABLE TO, ROTH
TO16xx (303R) No Damper $x x=06-18$ (Diameter)


ROUND-STACK TRANSFORMER
TO80xx (472)
$x x=04-24$ (Diameter)
Specify Stack opening

ROUND SPIN-IN TAKEOFF DX70×x (46) No damper DX71×× (47) Damper DX71Exx (47E) Damper Ext Kit $x x=04-18$ (Diameter)


ROUND SPIN-IN TO W/SCOOP
DX72xx (48)
$45^{\circ}$ Scoop
DX73xx (49)
$90^{\circ}$ Scoop
DX74xx (50)
$45^{\circ}$ Scoop \& Damper
DX75xx (51)
$90^{\circ}$ Scoop \& Damper


ROUND ADJ. TO, HALF-TAB
TO33xx (325H) No Damper xx = 05-07 (Diameter)


SQUARE SIDE TAKEOFF
TO38xx (328) No Damper TO38Dxx (328D) Damper TO38DExx (328DE) Damper Ext Kit
$x x=04-24$ (Diameter)


## CONICAL SPIN-IN TAKEOFF

DX69xx No damper DX69Dxx Damper DX69DExx Damper Ext Kit xx = 04-24 (Diameter)


ROUND SADDLE ADHESIVE TO
TA09xx (1231) No damper TA09Dxx (1231D) Damper TA09DExx (1231DE) Damper Ext Kit TA09DSxx (1231DS) Damper \& Scoop TA09S $x \times$ (1231S) Scoop $x x=06-32$ (Diameter)


SQUARE ADJ. ADHESIVE TAKEOFF
TA10xx (1303) No damper TA11xx (1303D) Damper TA11Exx (1303DE) Damper Ext Kit xx = 06-16 (Diameter)


SQUARE NON-ADJ. ADHESIVE TO
TA20xx (1308) No damper TA20Dxx (1308D) Damper TA20DExx (1308DE) Damper Ext Kit $x x=06$-16 (Diameter)



ROUND ADJ. ADHESIVE TAKEOFF
TA30xx (1325) No damper TA30Dxx (1325D) Damper TA30DExx (1325DE) Damper Ext Kit $x x=04-12$ (Diameter)


SQUARE CONICAL ADHESIVE TO
TA38xx (1328) No damper TA38Dxx (1328D) Damper TA38DExx (1328DE) Damper Ext Kit xx = 04-26 (Diameter)


## SQUARE ADHESIVE TAKEOFF

TA39xx (1329) No damper TA39Dxx (1329D) Damper TA39DExx (1329DE) Damper Ext Kit xx = 04-24 (Diameter)


TOP SQ. ADHESIVE TAKEOFF
TA51xx (1564) 1"R No damper TA51Dxx (1564D) 1"R Damper TA52xx (1565) 2"R No damper TA52Dxx (1565D) 2"R Damper xx = 04-16 (Diameter)

[^0]

## ROUND ADHESIVE TAKEOFF

TA40xx (1329R) No damper TA40Dxx (1329RD) Damper TA40DExx (1329RDE) Damper Ext Kit TA40DS $x x$ (1329RDS) Damper \& Scoop TA40Sxx (1329RS) Scoop TA40Fxx (1329RF) Flange xx = 06-32 (Diameter)


HIGH EFFICIENCY TAKEOFF
TA57xx (1573) No damper TA57Dxx (1573D) Damper TA57DE $x x$ (1573DE) Damper Ext Kit xx = 04-26 (Diameter)


## ROUND CONICAL ADHESIVE TO

TA60xx (1330) No damper TA60D $x \times$ (1330D) Damper TA60DExx (1330DE) Damper Ext Kit TA60DS $x \times$ (1330DS) Damper \& Scoop xx = 04-24 (Diameter)

## SUBMITTALS for any Adhesive Takeoff available upon request

## DUGTBOARD TAKEOFFS AND FITTINGS



DUCTBOARD COLLAR-SOLID RING DX76xx (52)
xx = 04-24
Options: $\mathrm{L}=1.5^{\prime \prime}$ tabs R6
L2 = 2" Tabs R8


DUCTBOARD COLLAR W/DAMPER
DX38x× (53)
xx = 04-24
Options: $\mathrm{L}=1.5^{\prime \prime}$ tabs R6 $\mathrm{L} 2=2^{\prime \prime}$ Tabs R8
S = Scoop


DB TWIST-IN COLLAR
DX60xx (40)
DX61xx (41) w/Damper xx $=04-20$


ADJ. ELBOW DB TAKEOFF TO94xx (92DB)
TO94D ${ }_{\text {xx }}$ w/Damper
$x x=05-16$

TABLOC DUCTBOARD COLLAR DX77xx (52T)
xx = 04-24
Standard supports both R6 and R8


TABLOC DB COLLAR W/DAMPER DX39x( 53 T )
$x x=04-18$
Standard supports both R6 \& R8


DB TWIST-IN COLLAR W/SCOOP DX62xx (42) $45^{\circ}$ Scoop
DX63xx (43) $90^{\circ}$ Scoop
DX64xx (44) $45^{\circ}$ Scoop \& Damper DX65xx (45) $90^{\circ}$ Scoop \& Damper xx $=04-20$


ADJ. ANGLE DB TAKEOFF TO95xx
TO95Dxx w/Damper
$x x=06-16$

SQUARE ADJ. DUCTBOARD TAKEOFF TO14xx (303DB)
TO14Dxx w/Damper $x x=04-16$
Standard supports R4
Options: U (Universal; R6 and R8)


SQUARE NON-ADJ. DB TAKEOFF
TO18xx (308DB)
TO18D $x \times$ w/Damper
$x x=04-12$
Standard supports R4
Options: $\cup$ (Universal; R6 and R8)


NON-ADJ. DB TAKEOFF W/1" RISE TO54xx (564DB)
TO54Dxx w/Damper
$x x=06-14$
Standard supports R4
Options: U (Universal; R6 and R8) L2 (R8 only)


ROUND ADJ. DB TAKEOFF TO31×x (325DB)
$x x=05-08$

## DUGTBOARD TAKEOFFS AND FITTINGS (CONT.)



SQUARE SIDE DB TAKEOFF TO39xx (328DB)
$x x=05-12$


## DB METAL BOOT FACE

Used in making DB ceiling boxes CA75xxyyz
xx = 04, 06, 08 (Register Width)
yy $=8,10,12,14$ (Register Length)
$z=1,2(1=R 4,2=R 8)$


DOUBLE DB TAKEOFF
TO45xx (464DB)
$x x=06,07,08$


## DUCTBOARD COLLAR BOX

For making DB Supply Air Boxes
DX83xxyyz
xx = 12-20 (Cold Air Vent Width)
yy =12-24 (Cold Air Vent Length)
z = 3 (Standard Height)


## DB RECTANGULAR STARTING

## COLLAR

DX35xxyy (520DB)
$x x=10,12$
$y y=20,24$
Specify R4, R6 or R8 Ductboard


## ADUSTABLE DUCTBOARD COLLAR

Adjusts for R4, R6, R8 or even Sheet Metal

## GEILING BOXES AND BOOTS



## CELLING BOOT SIDE

RB60xxyyzz
xx = 06-20 (Register Length) yy = 06-14 (Register Width) zz = 04-12 (Diameter out)
Example: $10 \times 6 \times 6=$ RB60100606


## CEILING BOX SIDE

RB61xxyyzz
xx = 06-24 (Register Length)
yy $=06-24$ (Register Width)
zz = 04-20 (Diameter out)
Options: F = Flange
FS = CRD Installed


## CEILING BOX TOP

RB62xxyyzz
xx = 06-24 (Register Length)
yy = 06-24 (Register Width)
zz = 04-20 (Diameter out)
Options: $\mathrm{F}=$ Flange
FS = CRD Installed

## CEILING BOX ANGLE

RB65xxyyzz
xx = 08-14 (Length)
yy $=06-14$ (Width)
zz = 04-10 (Diameter out)
Options: F = Flange
Specify Collar Angled or Collar Straight


## CAP REDUCER

RX23xxyy (450) w/Crimp RX24xxyy (451) No Crimp xx $=04$-18 (Larger Diameter) yy $=03-16$ (Smaller Diameter) Crimp on smaller diameter


## CAP INCREASER

RX25xxyy (452) w/Crimp
xx = 04-18 (Larger Diameter)
yy $=03-16$ (Smaller Diameter)
Crimp on larger diameter


## TAPERED REDUCER

RX40xxyyzz (430) w/Crimp RX41xxyyzz (431) No Crimp xx = 04-24 (Larger Diameter) yy = 03-22 (Smaller Diameter) $\mathrm{zz}=30,24,22(\mathrm{GA})$ Blank $=26 \mathrm{GA}$ Crimp on smaller diameter


## TAPERED INCREASER

RX43xxyyzz (432) w/Crimp
xx = 04-16 (Larger Diameter)
yy = 03-12 (Smaller Diameter)
$\mathrm{zz}=30,24,22(\mathrm{GA})$ Blank $=26 \mathrm{GA}$
Crimp on larger diameter

TEES AND WYES


## FLARED TEES

RX70xxyyzz (352)
xx = 03-36 (Air entry diameter) $y y=03-36$ (Air exit diameter crimped) $z z=03-36$ (Air exit diameter) RX70xx = All branches equal diameter Standard 26GA


## OLD STYLE TEES

## RX75×xzz

$x x=04-08$
$z z=$ Blank for 26GA, 24 for 24GA


## REDUCING WYE

RX79xxyyzz (228)
$x x=03-18$ (Air exit diamter, crimped)
yy =04-20 (Air entry diameter)
$z z=03-18$ (Branch diameter, crimped)


## BRANCH WYE

RX81xxyyzz (330)
xx = 03-20 (Air Entry diameter) yy = 03-18 (Branch 1, crimped) $z z=03-18$ (Branch 2, crimped) Bullhead is Branch $1=$ Branch 2


## FLUE WYE

RX80xxyyzz (229)
xx = 03-18 (Air Entry, furnace side) $y y=04-20$ (Air Eixt, flue side, crimped) zz = 03-18 (Air Entry, Branch diameter)


## BRANCH WYE, SINGLE ADJ.

RX82xxyyzz (332)
xx = 03-14 (Air Entry diameter) yy = 03-12 (Branch 1, crimped) $z z=03-12$ (Adjustable Branch 2, crimped)


## SWIVEL TEES

## RX71xxyyzz

$x x=04-06$ (Lower branch diameter) yy =04-07 (Body diameter) zz = 03-06 (Upper branch diameter)


## BRANCH WYE, DOUBLE ADJ.

## RX83xxyyzz (336)

$x x=03-14$ (Air Entry diameter) $y y=03-12$ (Adjustable Branch 1, crimped)
zz = 03-12 (Adjustable Branch 2, crimped)

DAMPER W/ 1 HARDWARE RX31xx (10)
xx = 03-12 (Diameter)
Damper blade, Spring loaded damper clip, washer, wing nut, handle all $5 / 16^{\prime \prime}$


ECONOMY DAMPER W/ 2 HRDWR ASSEMBLED
RX37xx (11)
xx = 04-18 (Diameter)
Damper blade, 2 Spades, 2 washers, 2 wing nuts and 2 handles all $1 / 4^{\prime \prime}$

DAMPER W/ 2 HARDWARE RX32xx (10)
xx = 04-36 (Diameter)
Damper blade, 2 Spring loaded damper clips, 2 washers, 2 wing nuts and 2 handles all $5 / 16^{\prime \prime}$


ECONOMY DAMPER
W/ 2 HRDWR
UNASSMBLD
RX38xx (11)
xx = 04-14 (Diameter)
Damper blade, 2 Spades, 2 washers, 2 wing nuts and 2 handles all $1 / 4^{\prime \prime}$

ECONOMY DAMPER W/ 1 HRDWR ASSEMBLED RX35xx (11)
xx = 04-12 (Diameter)
Damper blade, Spade, washer, wing nut and handle all $1 / 4^{\prime \prime}$

ECONOMY DAMPER W/ 1 HRDWR UNASSEMBLED RX36xx (11)
xx = 04-12 (Diameter)
Damper blade, Spade, washer, wing nut and handle all $1 / 4^{\prime \prime}$


Damper included
Double ECONO hardware for damper sizes up to 9", SLDC and PDC sizes $\geq 10$ "


DAMPER HARDWARE KITS HD01xx
xx = 01 (SLDC, H, W, WN)
02 (SLDC, H, W, WN, TDC)
03 (SLDC, H, W, WN, PDC)
04 (2-SLDC, H, W, WN)


## DAMPER CLIPS

## HD05xx

$x x=01$ (Threaded; TDC)
$x x=02$ (Plain; PDC)
$x x=03$ (Spring-Loaded; SLDC)

$$
\begin{aligned}
\text { SLDC } & =\text { Spring Loaded Damper Clip } \\
\text { TDC } & =\text { Threaded Damper Clip } \\
\text { PDC } & =\text { Plain Damper Clip } \\
\text { H } & =\text { Handle } \\
\text { W } & =\text { Washer } \\
\text { WN } & =\text { Wing Nut }
\end{aligned}
$$



BUTTERFLY DAMPER

## RX59xx

$x x=04-16$ (Diameter)


## DAMPER DISK BLANKS

 HD06xx$x x=03-36$ (Diameter)


## DAMPER HANDLES

HD04xx
$x x=01$ (Regular)
$x x=02$ (Double, 1/4" and 5/16")


## DAMPER EXTENSION KITS

 RX30xxxxxx = 01 (1" High Standoff) 015 (1.5" High Standoff) 02 (2" Standoff, 5/16" Shaft) 025 (2" Standoff, 1/4" Shaft) Used to extend damper handles when insulating fittings


## DAMPER WASHERS

HD02xx
$x x=01$ (Flat 5/16")
$x x=01$ A (Flat 1/4")


## DAMPER WINGNUTS

 HD03xxxx $=01$ (Stamped 5/16")
$x x=01 \mathrm{~A}($ Stamped 1/4")

OVAL PIPE
OP01xxyyy


CENTER

| BRANCH <br> DUCT (IN) | MAJOR <br> (IN) | MINOR <br> (IN) | CIRCUMF. <br> (IN) | X-SEC. <br> AREA <br> (SQ. IN.) | CAPACITY <br> (FFM) <br> .10 S.P. | EQUIV. <br> ROUND <br> (IN) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 ROUND |  |  | 15.7 | 19.6 | 68 |  |
| 6 ROUND |  |  | 18.8 | 28.3 | 108 |  |
| 7 ROUND |  |  | 22.0 | 38.5 | 160 |  |
| 8 ROUND |  |  | 25.2 | 50.3 | 230 |  |
| 5 OVAL | 6.0 | 3.25 | 15.7 | 15.3 | 53 | 4.6 |
| 6 OVAL | 7.6 | 3.25 | 18.8 | 19.3 | 78 | 5.2 |
| 7 OVAL | 9.1 | 3.25 | 22.0 | 23.3 | 92 | 5.7 |
| 8 OVAL | 10.7 | 3.25 | 25.2 | 27.3 | 118 | 6.1 |
| 10 OVAL | 13.8 | 3.25 | 31.4 | 35.3 | 148 | 6.8 |
| 3-1/4X10 STACK |  |  | 26.5 | 32.5 | 108 | 6.0 |
| 3-1/4X12 STACK |  |  | 30.5 | 39.0 | 134 | 6.5 |


|  | OVAL PIPE <br> RACK QTY |
| :---: | :---: |
|  | ANY LENGTH |
| 6 | 400 |
| 7 | 320 |
| 8 | 300 |



OVAL VERTICAL ANGLE 0X52xx
$x x=5,6,7,8$


OVAL TO ROUND BOOT, END

## OB71xxyy (71)

$x x=5,6,7,8$ (Oval dimension) $y y=5,6,7,8$ (Round dimension) For Round = Oval, leave yy blank Options: CO = Crimp oval end $C R=$ Crimp round end


OVAL VERTICAL ELBOW OX54xx
$x x=5,6,7,8$


## OVAL TO ROUND BOOT, STRAIGHT

OB72xxyy (72)
$x x=5,6,7,8$ (Oval dimension) $y y=5,6,7,8$ (Round dimension) For Round = Oval, leave yy blank Options: $\mathrm{CO}=$ Crimp oval end CR = Crimp round end


OVAL HORIZONTAL ANGLE OX51xx
$x x=5,6,7,8$


## OVAL TO ROUND BOOT, ELBOW <br> OB75xxyy (75)

$x x=5,6,7,8$ (Oval dimension) $y y=5,6,7,8$ (Round dimension) For Round = Oval, leave yy blank Options: CO = Crimp oval end $C R=$ Crimp round end


OVAL BOOT, END
OB10xyyz (L571O)
$x=2,3,4,6$ (Register height)
yy = 10, 12, 14 (Register width)
$z=5,6,7,8$ (Oval opening)


OVAL BOOT, STRAIGHT OB20xyyz (L572O)
$x=2,3,4,6$ (Register height)
yy = 10, 12, 14 (Register width) $z=5,6,7,8$ (Oval opening)


## OVAL STACKHEAD

OX10xxyyz
$x x=4,6,8,10$ (Register height) yy $=8,10,12,14$ (Register width) $z=5,6,7,8$ (Oval opening)


OVAL STACKHEAD, DOUBLE
OX11xxyyz
$x x=4,6,8,10$ (Register height)
yy $=8,10,12,14$ (Register width) $z=5,6,7,8$ (Oval opening)


OVAL BOOT, ELBOW OB30xyyz (L5750)
$x=2,3,4,6$ (Register height)
yy = 10, 12, 14 (Register width) $z=5,6,7,8$ (Oval opening)


## OVAL STACKHEAD, SPLIT

OX12xxyyz
$x x=4,6$ (Register height)
$y y=10,12$ (Register width)
$z=6,7$ (Oval opening)


OVAL START COLLAR OX63xx (4130) Crimp OX64xx (4120) No Crimp $x x=5,6,7,8$


OVAL TOP TAKEOFF OX60xx (5640)
$x x=5,6,7,8$


OVAL TOP TAKEOFF, DUCTBOARD
OX62xx (564ODB)
$x x=5,6,7,8$


OVAL BOOT, ANGLE OB40xyyz (L577O)
$x=2,3,4,6$ (Register height) $y y=10,12,14$ (Register width) $z=5,6,7,8$ (Oval opening)


## OVAL CAP

OX21xx (No Crimp)
$x x=5,6,7,8$


OVAL DUCTBOARD START COLLAR OX76xx (52Oval)
$x x=5,6,7,8$


OVAL ADAPTER

## OX70xyyz

$x x=2,3,4$ (Stack height)
$y y=10,12,14$ (Stack width)
$z=6,7$ (Oval opening)


## OVAL FIRE STOP

## OX90xx

$x x=5,6,7,8$

WALLSTACK, 2PC. SNAP LOCK SK01xyyzzz
$x=2,3$ (Stack depth), $2=2.25,3=3.25$
yy $=08,10,12,14$ (Stack width)
$z=012-115$ (Stack length)


STACK BOOT, END
SB10xyyz
$x=2,3$ (Stack depth)
$y y=08,10,12,14$ (Stack width)
$z=4,5,6,7,8$ (Round opening)
Standard with Stack Clips


STACK BOOT, STRAIGHT
SB20xyyz
x = 2, 3 (Stack depth)
yy = 08, 10, 12, 14 (Stack width) $z=4,5,6,7,8$ (Round opening)
Standard with Stack Clips


STACK BOOT, ELBOW
SB30xyyz
x = 2, 3 (Stack depth)
yy = 08, 10, 12, 14 (Stack width)
$z=4,5,6,7,8$ (Round opening)
Standard with Stack Clips


STACK BOOT, ANGLE
SB40xyyz
x = 3 (Stack depth)
yy = 10, 12, 14 (Stack width)
$z=6,7$ (Round opening)
Standard with Stack Clips


WALLSTACK VERTICAL ANGLE
SX23xxyy (314)
xx = 02, 03 (Stack depth)
yy $=08,10,12,14$ (Stack width)


## WALLSTACK STARTING COLLAR

SX33xxyy (520)
xx = 02, 03 (Stack depth)
$\mathrm{yy}=10,12,14$ (Stack width)


WALLSTACK VERTICAL ELBOW
SX21xxyy (307)
xx = 02, 03 (Stack depth) yy $=08,10,12,14$ (Stack width)


WALLSTACK SIDE TAKEOFF
SX42xyy (364)
x = 3 (Stack depth)
yy = 10, 12, 14 (Stack width)


WALLSTACK HORIZONTAL ANGLE
SX27xxyy (532)
xx = 02, 03 (Stack depth)
yy $=08,10,12,14$ (Stack width)


WALLSTACK TOP TAKEOFF
SX41xyy (362)
$\mathrm{x}=2,3$ (Stack depth)
yy = 10, 12, 14 (Stack width)

## WALL STAGK AND STAGK FITTINGS (CONT.)



## STACKHEAD, SHORT

SX70xyyabb (302)
$x=2,3$ (Stack depth)
yy = 10, 12, 14 (Stack width)
$a=4,6,8$ (Register width)
$b b=10,12,14$ (Register height)


## STACKHEAD, LONG

 W/EARSSX71xyyabb (309)
x = 2, 3 (Stack depth)
yy = 10, 12, 14 (Stack width)
a $=4,6,8$ (Register width)
$\mathrm{bb}=10,12,14$ (Register height)


STACKHEAD, OUT OF WALL
SX74xyyabb (313)
$x=2,3$ (Stack depth)
yy = 10, 12, 14 (Stack width)
$\mathrm{a}=4,6$ (Register width)
$\mathrm{bb}=10,12,14$ (Register height)


STACKHEAD
SX75xyyabb (315)
x = 2, 3 (Stack depth)
yy =10, 12, 14 (Stack width)
$a=4,6$ (Register width)


## OFFSET STACK

SX94xyyabb
x = 2, 3 (Stack A depth)
$y y=10,12,14$ (Stack A width)
a = 2, 3, 4, 6 (Stack B depth)
bb $=10,12,14$ (Stack B width)
3" Standard Offset, 9" long


JIMMY BOOT
SX96xyyabb


STACKHEAD, DOUBLE
SX73xyyabb (311)
x = 2, 3 (Stack depth)
$\mathrm{yy}=10,12,14$ (Stack width) $\mathrm{a}=4,6,8$ (Register width) $\mathrm{bb}=10,12,14$ (Register height) $b b=10,12,14$ (Register height)


## STACK ADAPTER, ELBOW <br> SX81xyyabb (602)

x = 3 (Stack A depth)
$y y=10,12,14$ (Stack A width)
a $=2,4,6$ (Stack B depth)
bb = 10, 12, 14 (Stack B width)

## WALLSTACK CONNECTOR

SX35xyy (604)
$x=2,3$ (Stack depth)
yy = 10, 12, 14 (Stack width)


WALLSTACK END CAP
SX44xyy (512)
$\mathbf{x}=2,3$ (Stack depth)
$y y=10,12,14$ (Stack width)



GALVANIZED SPIRAL

## ELBOWS

RX53xxyyGS
xx = 03-36 (Diameter)
$y y=22,24,26$ (GA)


## GALVANIZED SPIRAL REDUCER

RX44xxyyzz (433)
xx = 04-36 (Larger diameter) $y y=03-30$ (Smaller diameter) $z z=22,24,26(G A)$


## SPIRAL SADDLE FLUE W/90 ${ }^{\circ}$ TO

RX61xxyyzz (231)
xx = 03-20 (Takeoff Diameter) $y y=22,24,26$ (GA)
$z z=10-20$ (Pipe diameter to fit)
Example: 14" 24GA 90 Takeoff to fit 18" pipe


GALVANIZED SPIRAL ANGLES
RX50xxyyGS
xx = 03-36 (Diameter) $y y=22,24,26$ (GA)


## SPIRAL ECCENTRIC REDUCER

Flat one edge, 10\% Additional


## SPIRAL SADDLE FLUE W/45 TO

RX60xxyy (230)
xx = 04-36 (Diameter) $\mathrm{yy}=24,22$ (GA) Blank $=26 \mathrm{GA}$


## SPIRAL CONNECTOR

RX58xxyy
RX58Dxxyy (w/Damper)
$x x=04-36$ (Diameter)
$y y=26,24,22$ (GA)
Options: W (Wavey washer: damper only)


SPIRAL REGISTER SADDLE W/ADHESIVE
RX64xxyyzz
Same as RX65


## GALVANIZED SPIRAL

 END CAPS
## RX22xxyy (422) Crimped

xx=03-24 (Diameter)
$y y=24,22(G A)$ Blank $=26 G A$


PVC REGISTER BOOT, END
VB10xyyz (L571P)
$x=2-6$ (Register height)
yy = 06-14 (Register width)
$z=4-10$ (Round opening)
Specify L = Left, R=Right


PVC REGISTER SADDLE VX61xyy
$\mathrm{x}=2-08$ (Register height)
yy = 06-24 (Register width)

## PVC TEE

VX70xx (352P)
$x x=06-26$


ALL PVC PRODUCTS
1 mil coating inside 4 mil coating outside

## PVC ECCENTRIC REDUCER

VX44xxyy
$x x=06-28$ (Larger Diameter)
$y y=04-26$
Tapered reducer optional


PVC REGISTER BOOT, STRAIGHT
VB20xyyz (L572P)
$x=2-6$ (Register height)
yy = 06-14 (Register width)
$z=4-10$ (Round opening)


PVC $45^{\circ}$ SADDLE
VX62xx (230P)
xx=04-16 (Takeoff Diameter)

PVC FLUE WYE
VX80xx (229P)
xx = 06-36

## PVC ANGLE

VX50xx
$x=04-36$ (Diameter)


## PVC END CAP

vX20xx (422P)
$x=03-36$ (Diameter)


PVC REGISTER BOOT, ELBOW
VB30xyyz (L575P)
$\mathrm{x}=2-6$ (Register height)
yy =06-14 (Register width)
$z=4-10$ (Round opening)


PVC $90^{\circ}$ SADDLE
vX63xx (231P)
xx = 04-36 (Takeoff Diameter)


## PVC ELBOW

VX53xx
$x=04-36$ (Diameter)


## PVC CONNECTOR

VX58xx
$x=04-36$ (Diameter)


PVC PERIMETER BOOT

## VB70xyyz

$x=2-6$ (Register height)
yy = 06-14 (Register width)
$z=4-10$ (Round opening)


## PVC SHOE TAP

## VX66xx

$x x=06-12$ (Takeoff Diameter)

## DRYER/VENTILATION PRODUGTS

## ALUMINUM DRYER VENTS

AX74xx
xx = 03-12
Standard with air flap


GALVANIZED DRYER VENTS EX74xx
xx = 03-10
Standard with air flap

ALUMINUM FRESH AIR INTAKE
AX64xx
xx = 04-14
Standard with screen


## GALV. FRESH AIR INTAKES

CA64xx
CA64Dxx w/Damper
xx = 04-16
Standard with screen

## DRYER WALL BOXES

## EX30xxy

$x x=35$ (3.5" deep, oval opening)
425 (4.25" deep, round opening)
$\mathrm{y}=\mathrm{U}$ (Upward)
D (Downward)

## HANGER/SUPPORT PRODUGTS



DUCT HANGER "Z" STYLE DX14xx
$x x=08,09,10$ (Length)


## DUCT <br> HANGER <br> STRIPS

## DX15xyyyzz

$x=1,1.5,3$ (Width inches)
yyy $=012-120$ (Length inches)
$z z=18,22,24,26,30(G A)$
No holes standard

## STRAPPING COIL

DX16xyyyzz
$x=1$ or 2 (Width inches)
yyy = 100 (Length feet)
$z z=24$ (GA) Blank for 26GA
Options: P (Perforated)


## SUPPORT BRACKETS

## DX17xyyyzzhh

xx = 015, 03, 05 (1.5", 3", $5^{\prime \prime}$ Width)
$y y=18,28$ (Length inches)
$z z=16,18$ (GA)
hh = 9, 16, 19 (\# holes)

## ADJUSTABLE DUCT HANGERS

DX20xx
$x x=16,24$ (Length adjustable to)
Options: P (Prong/Spear Tip)
T (Tab/Screw Tip)
ene

## DUCT HANGER "L" STYLE

DX19xyyyzz
$x=1$ (Width inches)
yyy $=$ 008-018 (Length inches)
$z z=18$ (GA)
$\qquad$



## BRIDGE SPEARS

RX95xyy
x = 1 (Width)
yy = 16, 20 (Length)
Standard 18GA

"U" Channels

## DX08xxyyzz

$\mathrm{xx}=$ (Side 1 dimension)
yy = (Side 2 dimension) zz = 036, 060, 096 (U Chnl Length) Standard 26GA


## ANGLE STRIPS

DX18xxyyzzaa
$\mathrm{xx}=$ (Side 1 dimension)
$y y=($ Side 2 dimension)
zz $=018-0120$ (Angle Length)
$a a=26,28,24,22,18 \quad(G A)$

## INSULATED PRODUGTS NEW:



## INSULATED CEILING <br> BOX - ANGLE

## RB65xxyyzza

xx = 08-14 (Register Length) yy = 06-14 (Register Width) $z z=04-10$ (Diameter out) $a=$ R4, R6, R8 (Insulation factor) Options: F = Flange, FS=CRD Installed Specify collar angled or collar straight.


## IINSULATED CEILING

 BOX - SIDE
## RB61xxyyzza

xx = 06-24 (Register Length) yy = 06-24 (Register Width) zz = 04-20 (Diameter out) $a=R 4, R 6, R 8$ (Insulation factor) Options: F = Flange, FS=CRD Installed


## INSULATED CEILING BOX - TOP <br> RB62xxyyzza

$x x=06-24$ (Register Length)
yy = 06-24 (Register Width)
zz = 04-20 (Diameter out)
$a=R 4, R 6, R 8$ (Insulation factor)
Options: F = Flange, FS = CRD Installed


## NSULATED BOXES

DX46xxyyzza
$x x=12-30$ (Width)
$y y=12-30$ (Length)
$z z=12-30$ (Height)
$a=$ R4, R6, R8 (Insulation factor)


## INSULATED

RECTANGULAR DUCT
DT01xxyyzza 26GA
DT02xxyyzza 28GA DT03xxyyzza 24GA
xx = 08-30 (Slip dimension) $y y=08,10,12$ (Drive dimension) zz = 33, 36, 48, 60, 96 (Length) $a=$ R4, R6, R8 (Insulation factor)


## INSULATED PLENUMS

(NO TOP)

## PL11xxyyzza

$x x=10-28$ (Plenum Width) yy $=12-30$ (Plenum Depth) zz = 12-60 (Plenum Height) $a=$ R4, R6, R8 (Insulation factor) Note: All dimensions are outside dimensions and do NOT consider insulation thickness.
Standard 4 sides, x-broke. Top (PX18) ordered separately.
Options: Two Piece Designs, Flange In/Out, Hem, R4, R6, R8 Insulation Example: $16 \times 20.5 \times 48$ R6 Insul Plenum PL11162048R6A

All insulated products, except ceiling boxes, measure OUTSIDE metal dimensions and DO NOT consider insulation thickness. Example: $16 \times 20 \times 48$ R8 insulated plenum has a $12 \times 16$ air channel.


INSULATED PLENUM TOPS
PX18xxyya
xx = 10-28 (Plenum Width)
$y y=12-36$ (Plenum Length)
$a=$ R4, R6, R8 (Insulation factor)


## INSULATED FURNACE BOX

## CA50xxyyzza

$x x=14-40$ (Box Depth)
$y y=14-28$ (Box Width)
zz = 06-24 (Box Height)
$a=$ R4, R6, R8 (Insulation factor)


## INSULATED FURNACE SUPPORT BOX <br> CA40xxyyg Solid

Style 12" High CA40xxyyaabbg Cutout Style 10" High
$x x=18-48$ (Overall Box Length) yy = 17-30 (Overall Box Width) aa $=24,25$ (Cutout Length) bb $=08,10,12$ (Cutout Width) $g=R 4, R 6, R 8 \quad$ (Insulation factor)

## RETURN AIR PAN, NO

 COLLAR
## CA58xxyyzza

$x x=10-24$ (Wdith)
$y y=10-24$ (Length)
zz = 04-16 (Height, Standard $=4$ ") $a=R 4, R 6$, R8 (Ductboard Insulation factor)


## RETURN AIR BOX INSULATED

## CA59xxyyzza No Collar

$x x=10-24$ (Wdith)
$y y=10-24$ (Length)
$z z=10-24$ (Height, Standard $=6$ ")
$a=$ R4, R6, R8 (Insulation factor)


## INSUL. RETURN AIR BOX W/COLLAR

CA60xxyyzza w/Collar
xx = 06-24 (Wdith)
$y y=06-24$ (Length)
$z z=06-20$ (Collar diameter)
$a=R 4, R 6, R 8$ (Ductboard Insulation factor)


## SX76xxyyaabbg

$x x=14,16,20,25$ (Wall register width) $y y=20,24,25$ (Wall register height) aa $=14,16,20,25$ (Floor opening width) $\mathrm{bb}=10,12$ (Floor opening length) $\mathrm{g}=\mathrm{R} 4, \mathrm{R6}, \mathrm{R} 8$ (Insulation factor)


## ALUMINUM PIPE

AP01xxyy
xx = 03-18 (Diameter) $y y=24,48,60$ (Length)


ALUMINUM COLLAR AX10xx (412A) No Crimp AX11xx (413A) Crimped xx = 04-12 (Diameter)

## ALUMINUM ELBOW

AX53xx
xx = 03-16 (Diameter)


ALUMINUM LONG COLLAR
AX12xx (416A)
xx = 04-12 (Diameter)

ALUMINUM ANGLE
AX50xx
xx = 03-16 (Diameter)


ALUMINUM REDUCER
AX41xxyy (431A)
xx = 04-16 (Larger diameter)
$y y=03-14$ (Smaller diameter)

ALUMINUM LONG RADIUS ELBOW
AX54xx
xx = 03-16 (Diameter)
Use in dryer venting applications


ALUMINUM TRIM COLLAR AX09xx
xx = 04-12 (Diameter)


BLACK STEEL PRODUGTS


## BLACK PIPE

BP01xxyy
xx = 04-14 (Diameter)
$y y=12,24$ (Length)


## BLACK DRAWBAND

BX01xx (410B)
$x x=03-14$ (Diameter)


BLACK TRIM COLLAR BX10xx
xx = 04-14 (Diameter)

## BLACK CAP REDUCER

BX23xxyy (451B) No Crimp BX24xxyy (450B) Crimped xx=04-06 (Smaller Diameter, Crimp) yy $=06-08 \quad$ (Larger Diameter)


BLACK CAP
BX21xx (421B) No Crimp BX22xx (422B) Crimped xx = 04-14 (Diameter)


[^1]

## STAINLESS PRODUGTS



ROUND STAINLESS STEEL PIPE
NP01xxyy
$x x=16-35$ (Diameter)
$y y=12-36$ (Length)
Hammer Lock


STAINLESS STEEL START COLLAR
NX11xx (413S) Crimp $x x=04-18$ (Diameter)


## STAINLESS STEEL CAP

NX21xx (421S) Crimp
xx = 03-14 (Diameter)


STAINLESS STEEL TRIM COLLAR
NX10xx
xx = 04-16 (Diameter)


STAINLESS TAPERED REDUCER
NX41xxyy (431S) No Crimp
xx = 03-14 (Smaller Diameter) yy = 04-18 (Larger Diameter)


STAINLESS STEEL ADJ. ANGLE
NX50xx
$x x=03-20$ (Diameter)


STAINLESS STEEL RAIN CAP
NX28xx (30SS)
xx = 03-16 (Diameter)


STAINLESS STEEL CONNECTOR
NX58xx
xx = 06-08 (Diameter)


STAINLESS STEEL TEE
NX70xx (352S)
xx = 03-18 (Diameter)
All branches equal size


STAINLESS STEEL ADJ. ELBOW NX53xx
xx $=03-24$ (Diameter)


STAINLESS STEEL DRAWBAND
NX01xx (410S)
$x x=03-12$ (Diameter)

STAINLESS STEEL SPECS
Standard 304 Grade,
24GA Stainless

## GALVANIZED STEEL

 SHEETSGS01xxyyyzz
Specify G30, G60, or G90
STAINLESS STEEL SHEETS NS01xxyyyzz

BLACK STEEL SHEETS BS01xxyyyzz

## PVC COATED STEEL

 SHEETSVS01xxyyyzz

## ALUMINUM SHEETS

AS01xxyyyzz
$x x=24,36,48$ (Width)
yyy $=096,120$ (Length)
$z z=30,28,26,24,22$ (GA)
Call for latest availability and pricing

Lukjan offers flat sheets as a convenience to its customers and will be happy to ship these along with an order for other prefabricated sheet metal products. Minimum order is 25 sheets per type (26GA - 4x8, etc.).

MIScELLANEOUS


LUKJAN PRODUCT CATALOG
LC01
Specify quantity


## DUCT SIZING <br> CALCULATOR

LCO2
Specify quantity



## GALVANIZED DRAWBAND

 RX01xx (410)xx = 03-20 (Diameter)


## GALVANIZED TRIM COLLAR

## RX09xx

xx = 03-36 (Diameter)
26GA sizes 3"-22", 24GA 24"-36"

GALVANIZED CHIMNEY THIMBLE
RX05xx (415)
xx=03-12 (Diameter)


## WELDED CONDENSING

 UNIT BRACKET
## EX40xxyy

xx = 30 (Width)
$y y=30,36,42$ (Length)
Rated at 800 lbs .
galvanized rain cap
RX28xx (30)
$x x=03-36$ (Diameter)


## RANGE HOOD

SX86xxyyzz
xx = 03 (Range Hood width)
$y y=10$ (Range Hood length)
$z z=04-07$ (Diameter)

## CUSTOM PRODUGTS AND SOLUTIONS

Lukjan has extensive manufacturing capabilities available and can help design and build custom products and solutions for any job. Whether it's new home construction, retrofit or light commercial applications, Lukjan can build quality sheet metal products and develop solutions that can
save your customers custom fabrication costs, setup and installation time thereby giving them a competitive edge. Call us with your ideas and challenges and we'll see if we can develop a solution tailored for your market.

## STEEL INFORMATION

## Galvanized

Hot-dipped galvanized commercial steel is carbon steel sheet coated with zinc on two sides by the continuous hot-dipped process. This process results in a layer of zinc on each side of the steel sheet that is tightly adhering to the steel thru the formation of an iron-zinc alloy bonding layer that is formed by a diffusion process while the heated steel strip is in contact with the molten zinc. The galvanized coating is essentially pure zinc with trace amounts of aluminum ( 0.20 $-0.30 \%)$. The aluminum is added to improve the adhesion process between the zinc coating and the steel substrate.
Coating Weights are specified as G30, G60 and G90 and represent zinc weight (mass) for both sides of the galvanized sheet. $\mathrm{G} 30=0.30 \mathrm{oz} /$ $\mathrm{ft}^{2}, \mathrm{G} 60=0.60 \mathrm{oz} / \mathrm{ft}^{2}$ and $\mathrm{G90}=0.90 \mathrm{oz} / \mathrm{ft}^{2}$. G30 is the most commonly used for residential HVAC and G90 used primarily in commercial applications.

## Galvanneal

Galvanneal is similar to Galvanized in that they are both made by the hot-dip coating process. The main difference in the production process is that, to make a galvannealed coating, the strip is further heated by passing it through a furnace directly above the coating bath. By heating to approximately 1000 to $1050^{\circ} \mathrm{F}\left(538\right.$ to $565^{\circ} \mathrm{C}$ ) and holding the strip at this temperature for a specific amount of time, the zinc coating alloys with iron by diffusion between the molten zinc and iron from the steel strip. The result is that the final product has a coating that is an alloy of approximately $90 \%$ zinc and $10 \%$ iron. The final iron concentration depends on the heating cycle since the total amount of diffusion is a function of the time/temperature cycle. One of the primary attributes of the galvannealed coating is that the surface accepts paint very readily and the zinc-iron alloy coating can be welded more easily than galvanized and the coating is harder than a galvanized coating and is thus more resistant to scratching and manufacturing damage.
Common Coating Weights are designated as $\mathrm{A} 25, \mathrm{~A} 40$ and A 60 . $\left(\mathrm{A} 25=0.25 \mathrm{oz} / \mathrm{ft}^{2}\right.$ both sides $)$

## Galvalume

Galvalume steel is carbon steel coated with an aluminum zinc-alloy. The typical composition of the coating is $55 \%$ aluminum and $45 \%$ zinc. The coating is applied to the base metal in a continuous hot dip coating method. Galvalume is a product of choice for most agricultural, commercial, industrial and rural applications and thus not as economical for residential HVAC applications.. Under typical corrosive conditions, the coating generally will last much longer then a Galvanized coating of comparable thickness. Galvalume is two to four times as corrosion resistant as G 90 coated steel in outdoor marine, rural, and industrial environments. Galvalume will maintain its bright appearance and reflectivity in long-term service at temperatures up to 600 degrees Fahrenheit. The aluminum-zinc alloy coating provides excellent atmospheric corrosion resistance in a wide range of environments under many diverse conditions. The alloy coating of aluminum and zinc gives a combination of long-term corrosion resistance and galvanic protection at scratches and cut edges. Galvalume sheet can be arc welded with the shielded metal-arc and gas metal-arc processes.
Coating Weights are defined as AZ-50, AZ-55 and AZ-60. (AZ55 $=0.55 \mathrm{oz} / \mathrm{ft}^{2}$ both sides)

## Stainless Steel

Stainless Steels are iron-base alloys containing Chromium. Stainless steels usually contain less than 30\% Cr and more than 50\% Fe. Stainless Steel is not a single metal but an alloy that is a material made from two or more separate elements alloyed or "melted" together. They attain their stainless characteristics because of the formation of an invisible and adherent chromium-rich oxide surface film. This oxide establishes on the surface and heals itself in the presence of oxygen. Corrosion resistance and mechanical properties are commonly the principal factors in selecting a grade of stainless steel for a given application.
Type 304 (18-8) is an austenitic steel possessing a minimum of $18 \%$ chromium and $8 \%$ nickel, combined with a maximum of $0.08 \%$ carbon. The $18 \%$ minimum chromium content provides corrosion and oxidation resistance. Type 304, or one of its modifications, is the material specified more than 50\% of the time whenever a stainless steel is used.
Type 316 is also austenitic, non-magnetic, and thermally non-hardenable stainless steel like Type 304. What distinguishes Type 316 from Type 304 is the addition of molybdenum up to a maximum of $3 \%$. The molybdenum gives 316 better overall corrosion resistant properties than Grade 304, particularly higher resistance to pitting and crevice corrosion in chloride environments.

## AgION Anti-microbial Coated Steel

AgION is an anti-microbial compound containing as the name implies, silver IONs that react with moisture to inhibit mold and mildew growth. When the silver ions come into contact with bacteria and other microbes, their chemical interaction disrupts electron transfer and respiration, suppressing microbe growth on the product. The AgION anti-microbial compound is blended
into a paint system, which is applied to the steel using a continuous-roll coil coating process. The coating is cured at more than $400^{\circ} \mathrm{F}$, eliminating VOC (volatile organic compound) emissions.

The compound can be applied to either carbon or stainless steel, coated on one or both sides. The AgION antimicrobial compound has been registered with the Environmental Protection Agency (EPA) for use in heating, ventilating and air conditioning components.

## PVC Coated Steel

Polyvinyl chloride (PVC)-coated steel is used for fume exhaust, underslab, and underground duct systems. The PVC coating is applied to both sides of the steel with the exterior typically 4 mil thickness to provide maximum corrosion protection and an interior coating of one mil.

## Black Coated Steel

Black coated steel is a standard 24GA steel with a high temperature, scratch resistant black paint coating one side. Various coatings exist but all provide added protection of the steel surface and some resistance to discoloration in higher heat applications.

## Aluminum

Aluminum Alloy 3003-H14 is an excellent metal for general sheet metal work where only moderate strength but superior corrosion resistance is required. The terminology for the thickness of aluminum sheets does not use a Gauge number - like Galvanized or other carbon steel - it is instead requested by its' actual decimal thickness in inches. There are many alloys of Aluminum; 3003 is widely used as a general-purpose alloy for moderate-strength applications requiring good workability. The density of aluminum is approximately $1 / 3$ that of galvanized steel.

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WWW.LUKJAN.COM

EMAIL:
SALES@LUKJAN.COM

## $\underbrace{C O}_{M E T A L T}$


[^0]:    Lukjan can manufacture any adhesive fitting using Anti-Microbial (AgION) coated steel. Call for special quote

[^1]:    BLACK TAPERED REDUCER

    BX40xxyy (430B) No Crimp BX41xxyy (431B) Crimped
    $x x=03$-09 (Smaller Diameter, Crimp)
    yy $=04-12 \quad$ (Larger Diameter)

