

- Grease Duct
- Pizza Oven Chimney
- BBQ Chimney/Exhaust
- Dishwasher Exhaust

CK Commercial Kitchen Exhaust

Models SWCK, DWCK+1,
& **DWCK-ZC**

Submittal Record

- SWCK Single Wall
- DWCK+1 Double Wall 1.25" Fiber
- DWCK-ZC Double Wall 3.25" Fiber for UL 2221 2-Hour Fire Resistance Shaft**

PROJECT: _____

PREPARED BY: _____

PREPARED FOR: _____



INDEX

INTRODUCTION

Commercial Kitchen Exhaust Systems	3
40 Years of Experience	3
Research & Development	4
All Stainless Steel Construction	4
Best Insulation	4
Joint Conn. Surface Area / Install	5

TECHNICAL SPECIFICATIONS

Model and Part Identifications	6
Material and Thicknesses	6
Underwriters Laboratories Listings	6
Code and Standards	6
Operating Pressures	6
Operating Temperatures & Clearances	6
Joint Details	7
SWCK Joint Detail	7
DWCK+1/-ZC Joint Detail	7
Sizing/Pressure Calculations	7
Submittal and Warranted Designs	7
Pipe Weight per Foot	7

ITEMS (** indicates Standard Items)

(supports)

**APS Anchor Plate Support

HDB Heavy Duty Base

WB Wall Brackets

FR Full Ring

HR Half Ring

**LSB Light Support Band

GWB Guy Wires Band

(pipe and other lengths)

**J-600 600°F Sealant

**LB Locking Band

12L 12" Fixed Pipe Length

**18L 18" Fixed Pipe Length

**18CL 18" Cutable Pipe Length

24L 24" Fixed Pipe Length

24CL 24" Cutable Pipe Length

30L 30" Fixed Pipe Length

**36L 36" Fixed Pipe Length

**36CL 36" Cutable Pipe Length

42L 42" Fixed Pipe Length

UDL Universal Drain Length

TPL Test/Nozzle Port Length

24AL 24" Adjustable Length

48AL 48" Adjustable Length

**IAD Inline Access Door Length

(fittings and accessories)

15EL 15° Elbow

30EL 30° Elbow

45EL 45° Elbow

**45EA 45° Elbow Access

87EL 87° Elbow

**87EA 87° Elbow Access

90EL 90° Elbow

45T 45° Tee

45TØ 45° Reduction Tee

45GT 45° Grease Duct Tee

87T 87° Tee

87TØ 87° Reduction Tee

87GT 87° Grease Duct Tee

90T 90° Tee

90TØ 90° Reduction Tee

90GT 90° Grease Duct Tee

87BT 87° Boot Tee

87BTØ 87° Reduction Boot Tee

87GBT 87° Grease Duct Boot Tee

90GBT 90° Grease Duct Boot Tee

90BT 90° Boot Tee

90BTØ 90° Reduction Boot Tee

**87BHTØ 87° Reduction Bullhead Tee

**87IBTØ 87° Increasing Boot Tee

90WT 90° Wye Tee

90WTØ 90° Reduction Wye Tee

DCB Drain Tee Cap Bottom

DCS Drain Tee Cap Side

TCA Tee Cap Access

GTCA Grease Duct Tee Cap Access

(increasers and reducers)

TEI Tapered Eccentric Increaser

TER Tapered Eccentric Reducer

SI Stepped Increaser

SR Stepped Reducer

(start and end adapters)

**FCS Flange Collar Adapter - Start

FCE Flange Collar Adapter - End

**VB Vee Band

TRS Transition to Round - Start

**NWA No Weld Hood Adapter

**NWHO No Weld Hood Adapter - Oval

**FPE:??x?? Fan Plate Adapter - End

(terminations)

OTS Open Termination w/Screen

SCN Stack Cap

SCS Stack Cap w/Screen

MCS Miter Cut Termination w/Screen

NLWH No-Loss Weather Head

EC Exit Cone

(thimble and flashings)

HTT High Temperature Insulated Thimble

FRF Flat Roof Flashing

PRF Pitched Roof Flashing

VSC Ventilated Storm Collar

FCF Flat Cone Roof Flashing

PCF Pitched Cone Roof Flashing

SCCF Storm Collar for Cone Flashing

SAMPLE DESIGNS

Sample 1 - Commercial Grease Duct

Sample 2 - Pizza Oven Chimney & GD

Sample 3 - Stand-Alone Restaurant

Sample 4 - Commercial Dishwasher

WARRANTY STATEMENT - Grease Duct

WARRANTY STATEMENT - Chimney System

NOTES/COMPANY INFO

INTRODUCTION

Jeremias Commercial Kitchen Exhaust Systems

Models SWCK, DWCK+1 and **DWCK-ZC** are factory built high pressure and high temperature exhaust systems for various type of appliances. Model SWCK is Single Wall. Models DWCK+1 and **DWCK-ZC are Double Wall**. All Models may be intermixed in the same grease duct or chimney system.

All Models are intended for use in kitchen ventilation such as Grease Ducts, Pizza Oven Chimneys, and Dishwasher Exhaust.

STRONG - OPEN - INTERNATIONAL



40 Years of Experience

Jeremias is one of the world's leading manufacturers of flue and chimney systems for the exhaust of gases and ventilation, covering all kinds of domestic, commercial and industrial applications. Jeremias Group product range includes over fifty (50) different CE or UL certified systems covering commercial and domestic applications complimented by freestanding Industrial steel chimneys up to 10 feet in diameter. Jeremias offers its clients a wide range of high quality products, technical support for projects, and stack sizing software.

With over 40 years of experience in the venting and component exhaust industries, Jeremias has seven (7) manufacturing plants in six (6) different countries worldwide. Jeremias today has more than 1,200 employees and is proud of its German engineering origins, and fortunately is now also manufactured in the USA from 100% local materials!



INTRODUCTION

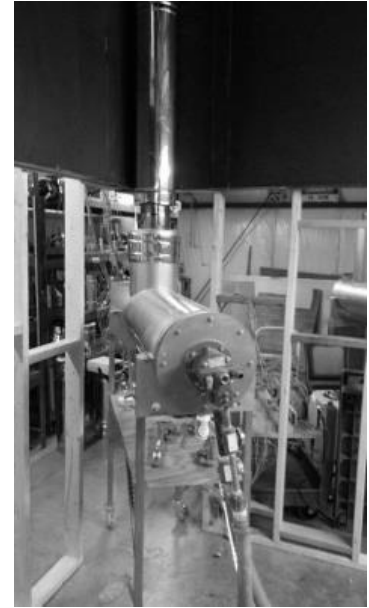
Research and Development

Jeremias has over fifty (50) CE Certified exhaust and chimney systems worldwide for domestic, commercial, and industrial applications. “CE Certification” is the mandatory conformity safety testing for products sold throughout Europe and other parts of the world.

In North America, Jeremias employs only Underwriters’ Laboratories (UL) for testing, certifications, and listings to all applicable UL and ULC Standards.

Opened in 2013, the Jeremias R&D Lab in Logan, OH has the industry’s most experienced lab technicians on staff and incorporates the latest equipment technologies. This laboratory enables Jeremias to provide industry leadership with a continued focus on new factory-built exhaust applications and unique listings.

For example, Jeremias DWCK+1 double wall system is the first double wall commercial kitchen exhaust system in North America that is purposely designed to use insulation between the walls from the start; whereas other manufacturers derived insulated versions from the original air space design.



All Stainless Steel Construction



The entire construction is stainless steel. Including all accessories such as supports and angle rings.

This means there is no cross contamination in the factory from carbon steel cutting/welding.

The inner pipe and the outer jackets have laser welded seam and all fittings are tig welded. Jeremias cleans all external welds to assure the customer clearly sees the quality standard we are setting.

Jeremias backs our Grease Duct systems with an industry best Limited Lifetime Warranty.

Best Insulation

Jeremias Model DWCK+1 uses 8 PCF ceramic fiber insulation that has neither binder nor lubricant and does not emit any fumes or smell during the first high temperature firing.

With Model DWCK+1, we compress this 1½” thick blanket into a 1¼” area delivering better clearances and skin temperatures than other loose-fitting blanket insulated pipes. This compressed insulation also eliminates the need for brackets and spot welding between the inner and outer jacket – this means less weight and no hot spots at the joints. This also eliminates any chance of insulation settling during shipment and storage.

See the installation clearance example using the same pipe I.D. as compared to other manufacturers. For example, Jeremias Model DWCK+1 is clearly the industry leader in the smallest required footprint.



Jeremias Model DWCK-ZC uses 10 PCF ceramic fiber insulation of the same quality to fill the 3¼” space between the inner and outer jackets.

INTRODUCTION

Largest Joint Connection Surface Area / Easiest Install

Jeremias Commerical Kitchen exhaust systems utilizes a **Patent Pending** technology which is the absoutely **easiest to install** in the industry.

Installation:

1. Apply silicone to the male side
2. Push the ends together
3. Install the locking band.

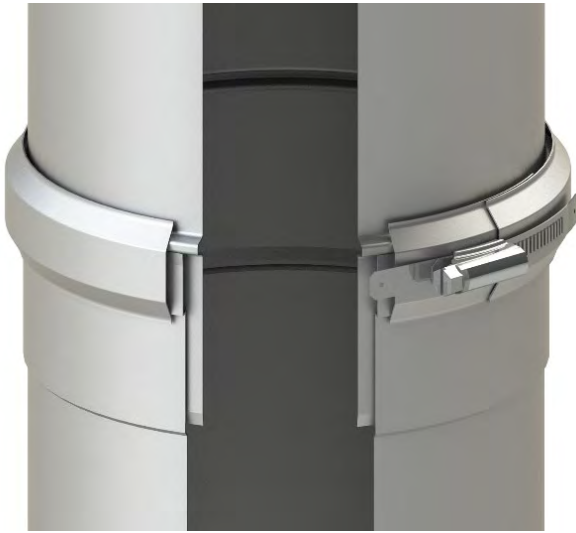
The installed joint creates a liquid-tight seal. This easy installation saves an estimated **50% labor savings** over flange to flange assemblies.

The overlapping inner also protects the silicone seal against high-pressure washings in commercial kitchen exhaust. It also self-aligns the inner pipe eliminating a third person on horizontal installations and quicker installs on the vertical. This is industry best connection for **leak-free** installations!

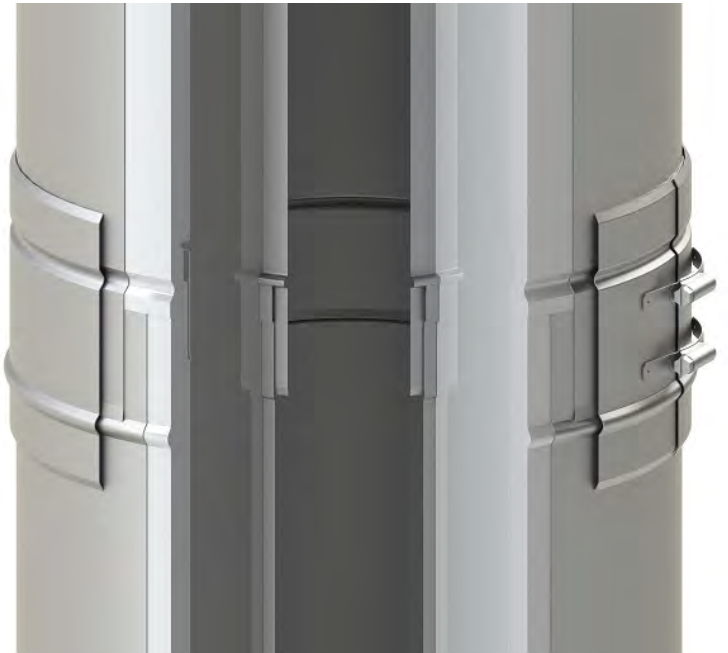
All pipe lengths can be **field cut-to-fit** making this the most installer friendly system available. Since various pipe lengths and adjustable lengths are not required, a twelve (12) part **Standard Items** list can be used to make up any exhaust system.



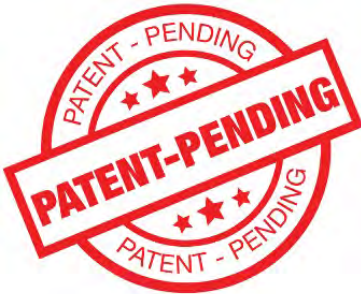
Double Wall Model **DWCK+1**



Single Wall Model **SWCK**



Double Wall Model **DWCK-ZC**



TECHNICAL SPECIFICATIONS

Model and Part Identifications

Part numbers include the Model, diameter, item code, and suffix (if applicable)

Example 1: SWCK18-36L for a Model SWCK single wall, 18 inch inner diameter, 36 inch length of pipe.

Example 2: DWCK10-90WT+1 for a Model DWCK+1 double wall, 10 inch inner diameter, 90° Wye Tee.

Material and Thicknesses

Inner Liner:
Stainless Steel, thickness per UL-1978 and UL-2221

Insulation:
SWCK: None
DWCK+1: 1.5" thick 8 PCF ceramic fiber, compacted to 1.25" (9.6 PCF net effective)
DWCK-ZC: 3.25" thick 10 PCF ceramic fiber

Outer Jacket:
Stainless Steel, thickness per UL-1978 and UL-2221

Supports and All Accessories:
Stainless Steel

Underwriters Laboratories (UL) Listings

- United States:
- SWCK**
- UL-1978 Standard, Grease Duct
 - UL-103 Standard, Building Heating Appliance Chimney
- DWCK+1**
- UL-1978 Standard, Grease Duct
 - UL-103 Standard, Building Heating Appliance Chimney
 - UL-103 Standard, Additional Type HT Listing
 - UL-2561 Standard, 1400F Chimney Listing
- DWCK-ZC**
- UL-1978 Standard, Grease Duct
 - UL-2221 Standard, Tests of Fire Resistive Grease Duct Enclosure Assemblies

- Canada:
- SWCK**
- CAN/ULC-S662, Grease Duct
- DWCK+1**
- CAN/ULC-S662, Grease Duct
 - ULC/ORD-C959, Industrial Type 540°C Chimney
 - ULC/ORD-C959, Industrial Type 760°C Chimney

Code and Standards

Models SWCK, DWCK+1, and DWCK-ZC installed per their Installation Instructions are code compliant with:

- NFPA 96
- NFPA 211
- NFPA 54
- NFPA 31
- NFPA 37
- CSA-B149
- IMC
- IFGC
- UMC
- CMC

The following organizations produce one or more of the above references codes and standards or provide important guidelines for installation and use of the SWCK, DWCK+1, and DWCK-ZC exhaust systems:

- ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers)
- CSA (Canadian Standards Association)

- ICC (International Code Congress)
- IAPMO (International Association of Plumbing and Mechanical Officials)
- NFPA (National Fire Protection Association)
- UL (Underwriters Laboratories, Inc.)
- ULC (Underwriters' Laboratories of Canada)

Operating Pressures

Models SWCK, DWCK+1, and DWCK-ZC have been evaluated and Listed by UL for positive internal static pressures up to 20" W.C.

Operating Temperatures and Clearances

Operating Temperatures:

Criteria	Permitted Temperatures
UL-1978 Grease Duct ULC-S662 Grease Duct	500°F (260°C) Continuous 2000°F (1093°C) for 30 Minutes
UL-103 Building Heating Appliance Chimney ULC/ORD-C959 Industrial Type 540°C Chimney	1000°F (540°C) Continuous 1400°F (760°C) Intermittent
Additional UL-103 Type HT	2100°F (1150°C) for 10 Minutes
UL-2561 1400°F Chimney ULC/ORD-C959 Industrial Type 760°C Chimney	1400°F (760°F) Continuous 1800°F (980°C) Intermittent

Minimum Airspace Clearance to Combustibles:

Minimum Airspace Clearance to Combustibles					
Model:	SWCK	DWCK+1			DWCK-ZC
Application:	Single-Wall Grease Duct & Building Heating Appliance	Building Heating Appliance 1000°F Chimney	Building Heating Appliance 1400°F Chimney	Grease Duct UL1978	Grease Duct & Fire-Resistant Enclosure UL1978 & UL2221
3" - 6" (76mm - 152mm)	18" (457mm)	0.50" (12.7mm)	0.50" (12.7mm)	2" (50.8mm)	0" (0 mm)
7" - 14" (178mm - 456mm)	18" (457mm)	0.75" (19.1mm)	0.75" (19.1mm)	2" (50.8mm)	0" (0 mm)
16" - 34" (406mm - 863mm)	18" (457mm)	1.00" (25.4mm)	1.00" (25.4mm)	3" (76.2mm)	0" (0 mm)
36" (914mm)	18" (457mm)	1.00" (25.4mm)	1.00" (25.4mm)	4" (101.6mm)	0" (0 mm)
38" - 48" (965mm - 1219mm)	18" (457mm)	2.00" (50.8mm)	N/A	5" (127mm)	N/A

Jeremias Model SWCK single wall may be field insulated. Follow NFPA 96 regarding methods of achieving reduced clearances, zero clearances, or fire resistance enclosures for Grease Ducts.

Jeremias Model DWCK+1 uses 1.5" thick ceramic fiber blanket that is compressed to a 1.25" space for reduced clearances to combustibles. One external layer of field-applied fire-wrap meets the ASTM E2336 requirements.

TECHNICAL SPECIFICATIONS

Do not wrap or place any type of insulation in the required airspace surrounding the Building Heating Appliance Chimney applications in an effort to reduce the clearance to combustibles or to create some sort of fire protective enclosure.

Clearance to non-combustibles:

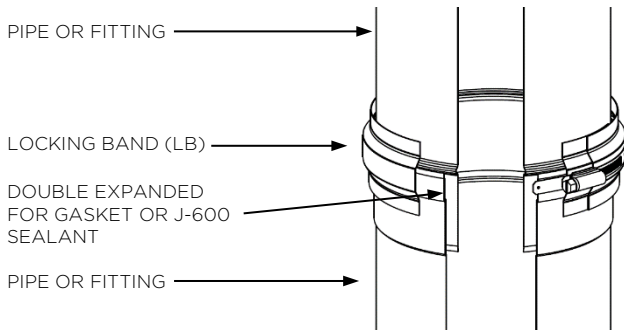
As required for installation, access, inspection, latest NFPA, or per local code.

Joint Details

Model SWCK single wall commercial kitchen exhaust incorporates a male/female overlapping joint and locking band. This Patent Pending connection permits any pipe length to be cut to fit in the field.

Jeremias supplied J-600 sealant is applied 1.5 inch from the end on the male side, that male end is inserted into the female end, and secured in place by the locking band to create a liquid-tight seal.

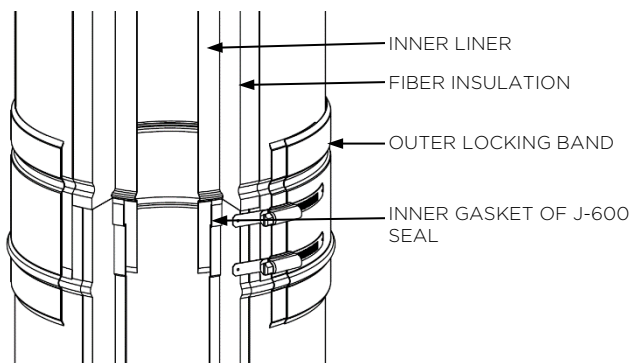
Model SWCK Joint Assembly Detail



Model DWCK+1 & DWCK-ZC double wall incorporates the same overlapping inner of SWCK and has an external locking band. This Patent Pending connection permits any pipe length to be cut to fit in the field.

Jeremias supplied J-600 sealant is applied on the inner male side, that male end is inserted into the female inner, and secured in place by the locking band to create a liquid-tight seal.

Model DWCK+1 & DWCK-ZC Joint Assembly Detail

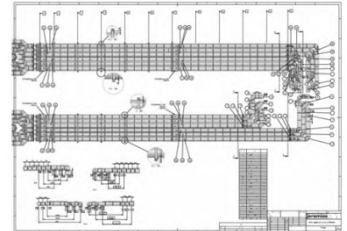


Sizing/Pressure Calculations

Jeremias' engineering uses its own software based upon the "Chimney, Gas Vent, and Fireplace Systems" chapter of the ASHRAE Handbook to assure that the exhaust and chimney system is sized in accordance with the appliance manufacturers' installation instructions.

Submittal and Warranted Designs

Jeremias also provides CAD layout designs that show all required accessories including drains, supports, access panels, etc., permitting it to be installed in accordance with any specific appliance manufacturers' installation instructions.

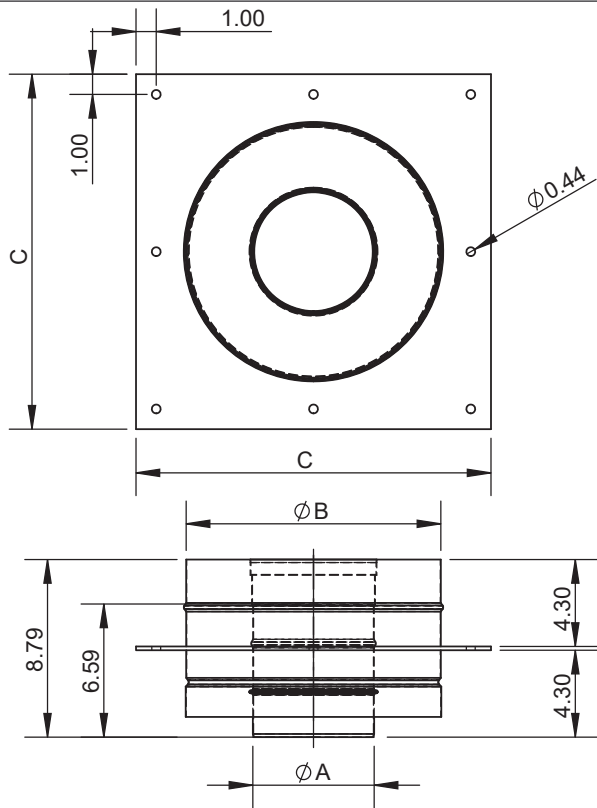


Pipe Weight per Foot

The approximate installed weight of the Jeremias exhaust systems can be found using this table. This table does not include accessories such as supports and guides, nor shipping packaging or palletizing weight.

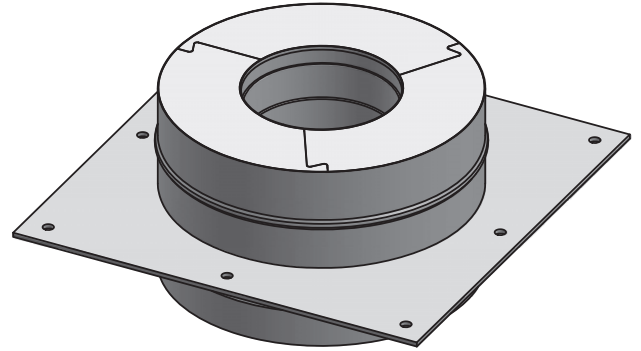
Pipe Weight:

Model	SWCK	DWCK+1	DWCK-ZC
Insulation:	N/A	1.25"	3.25"
Inside Diameter	lb/ft	lb/ft	lb/ft
3"	1.1	4.4	10.1
4"	1.5	5.5	11.7
5"	1.9	6.5	13.4
6"	2.2	7.6	15
7"	2.6	8.6	16.7
8"	3	9.7	18.3
9"	3.4	10.7	20
10"	3.7	11.8	21.6
11"	4.1	12.8	23.3
12"	4.5	13.8	25
13"	4.9	14.9	26.6
14"	5.2	15.9	28.3
16"	6	18	31.6
18"	6.7	20.1	34.9
20"	7.5	22.2	38.2
22"	8.2	24.3	41.5
24"	9	26.4	44.8
26"	9.5	28.5	48.1
28"	10.3	30.6	51.4
30"	11	32.7	54.7
32"	11.7	34.7	58.1
34"	12.5	36.8	61.4
36"	13.2	38.9	64.7
38"	19.3	51.4	78.8
40"	20.3	54.1	82.7
42"	21.3	56.7	86.5
44"	22.3	59.3	90.4
46"	23.3	61.9	94.2
48"	24.3	64.5	98



Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
C	17.56	18.56	19.56	20.56	21.56	22.56	23.56	24.56	25.56	27.56
lb	24.44	26.82	29.19	31.59	34.03	36.48	38.90	41.38	43.91	49.02

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
C	29.56	31.56	33.56	35.56	37.56	39.56	41.56	43.56	45.56	47.56
lb	54.21	59.49	64.86	70.31	75.86	81.49	87.23	93.04	98.93	104.94

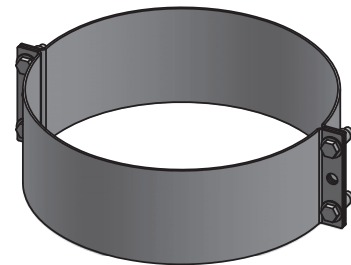
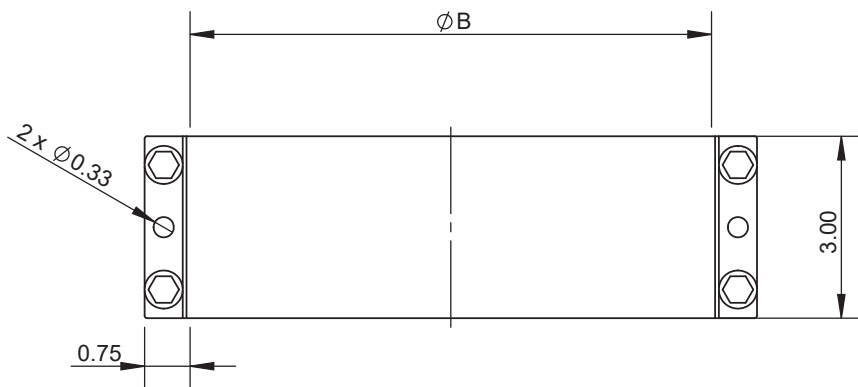


*INCLUDES 1 LOCKING BAND

Jeremias Inc.	date 11/16/2020	drawn by JJR	model DWCK-ZC	code APS	description DWCKØ-APS-ZC Anchor Plate Support
---------------	--------------------	-----------------	------------------	-------------	--

Ø	10	11	12	13	14	16	18	20
B	16.5	17.5	18.5	19.5	20.5	22.5	24.5	26.5
lb	2.90	3.06	3.21	3.37	3.54	3.85	4.16	4.49

Ø	22	24	26	28	30	32	34	36
B	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
lb	4.80	5.13	5.43	5.76	6.07	6.38	6.71	7.02

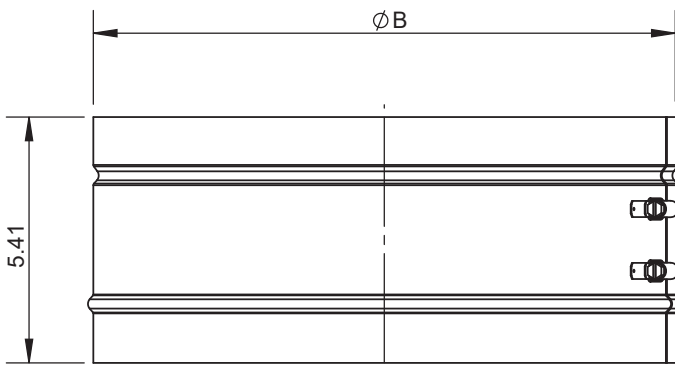


Jeremias Inc.	date 11/16/2020	drawn by JJR	model DWCK-ZC	code LSB	description DWCKØ-LSB-ZC Light Support Band
---------------	--------------------	-----------------	------------------	-------------	--



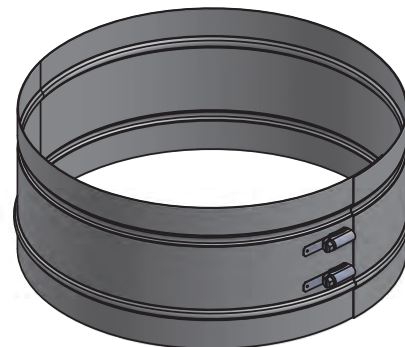
Vent Diameter	Number of Joints Per 10 oz. Tube
3" - 6"	6.7
8" - 10"	6
11" - 12"	5.3
13" - 16"	4.7
18" - 20"	4
22" - 24"	3.3
26" - 28"	2.7
30" - 32"	2
34" - 36"	1.3
38" - 48"	0.7

Jeremias Inc.	date 11/24/2020	drawn by JJR	model ALL	code J-600	description J-600 Sealant
---------------	--------------------	-----------------	--------------	---------------	------------------------------

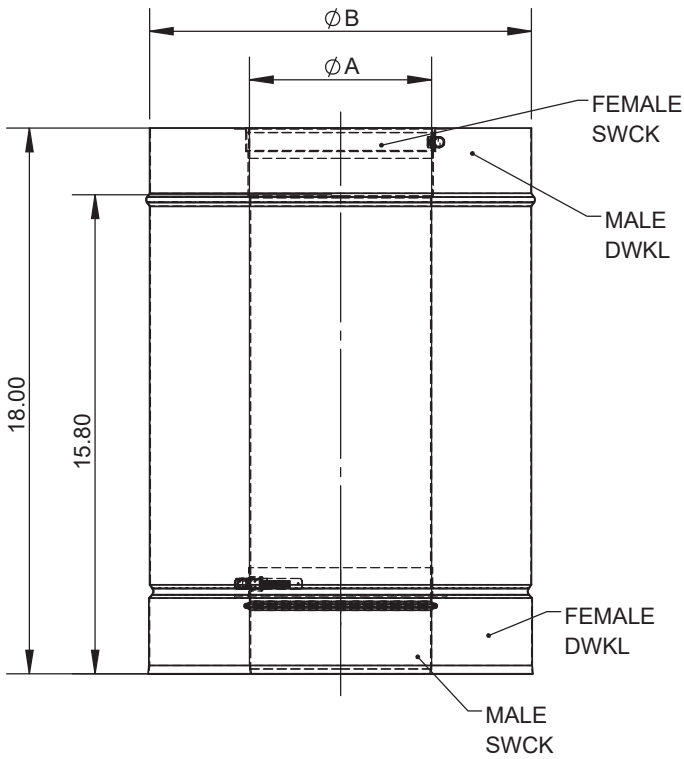


Ø	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
lb	1.76	1.87	2.00	2.13	2.24	2.38	2.51	2.62	2.75	2.99

Ø	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
lb	3.23	3.50	3.74	3.98	4.25	4.49	4.73	4.99	5.24	5.48

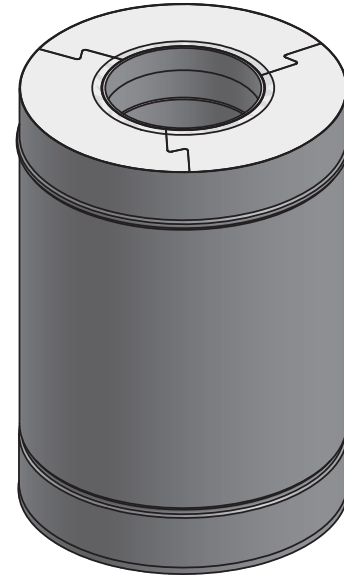


Jeremias Inc.	date 11/16/2020	drawn by JJR	model DWCK-ZC	code LB	description DWCKØ-LB-ZC Locking Band
---------------	--------------------	-----------------	------------------	------------	---



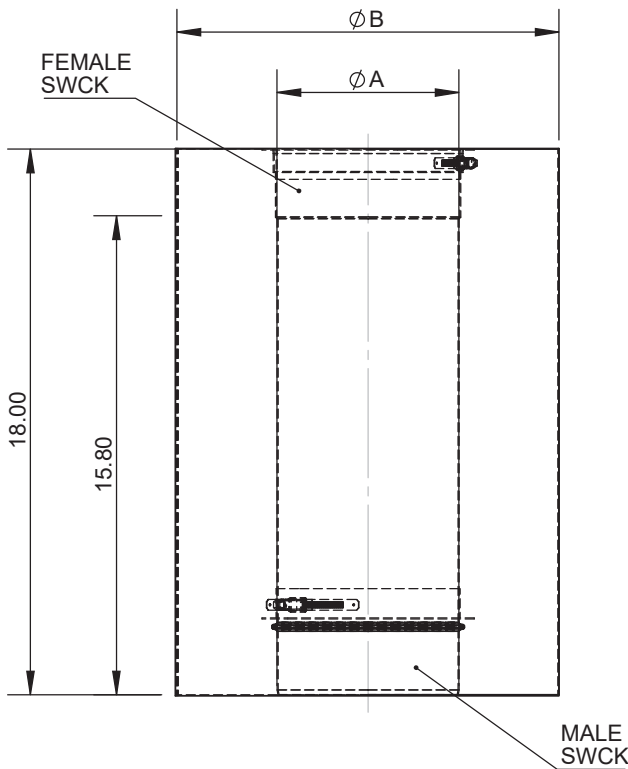
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
lb	21.69	23.98	26.27	28.53	30.82	33.11	35.40	37.69	39.97	44.55

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
lb	49.13	53.70	58.28	62.85	67.43	71.98	76.56	81.14	85.71	90.29



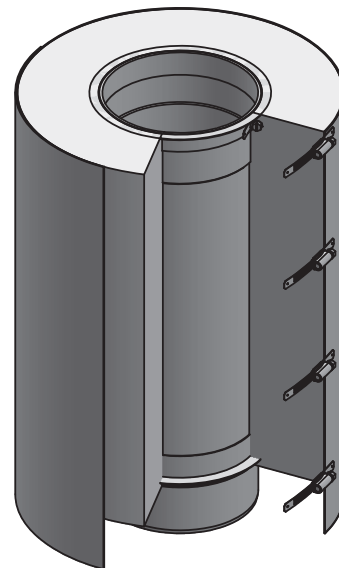
*FLANGE SUPPORT BANDS INCLUDED
*INCLUDES 1 LOCKING BAND

Jeremias Inc.	date 11/18/2020	drawn by JJR	model DWCK-ZC	code 18L	description DWCKØ-18L-ZC 18" Fixed Length
---------------	-----------------	--------------	---------------	----------	---



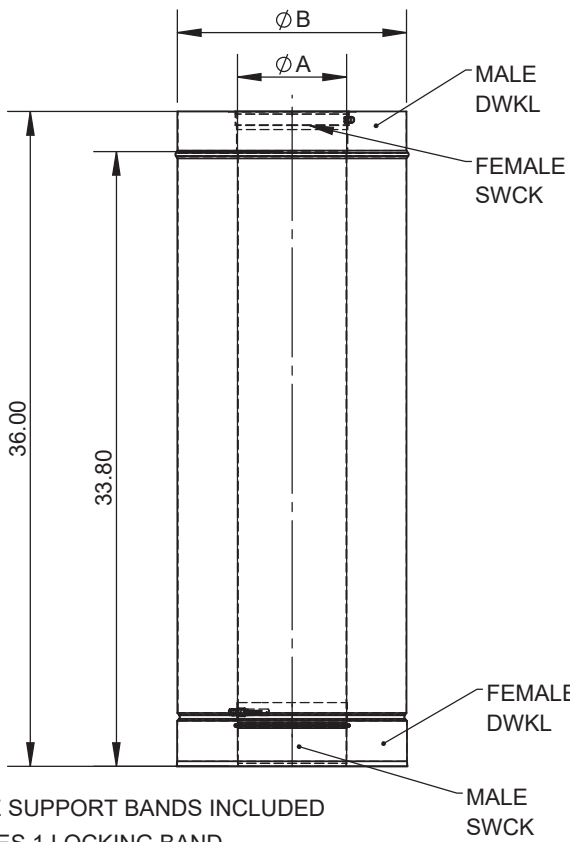
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
lb	21.69	23.98	26.27	28.53	30.82	33.11	35.40	37.69	39.97	44.55

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
lb	49.13	53.70	58.28	62.85	67.43	71.98	76.56	81.14	85.71	90.29



*FLANGE SUPPORT BANDS INCLUDED
*INCLUDES 1 CUT LENGTH LOCKING BAND

Jeremias Inc.	date 11/19/2020	drawn by JJR	model DWCK-ZC	code 18CL	description DWCKØ-18CL-ZC 18" Cut Pipe Length
---------------	-----------------	--------------	---------------	-----------	---



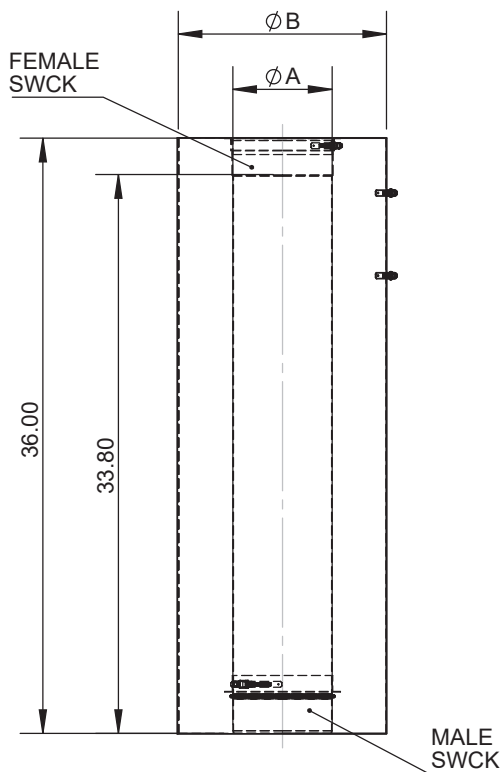
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
lb	42.04	46.51	51.00	55.46	59.93	64.42	68.88	73.35	77.84	86.79

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
lb	95.74	104.68	113.63	122.58	131.54	140.47	149.42	158.38	167.33	176.26



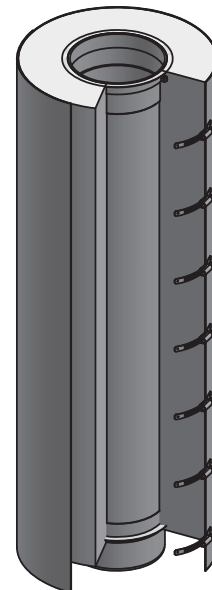
*FLANGE SUPPORT BANDS INCLUDED
*INCLUDES 1 LOCKING BAND

Jeremias Inc.	date 11/18/2020	drawn by JJR	model DWCK-ZC	code 36L	description DWCKØ-36L-ZC 36" Fixed Length
---------------	-----------------	--------------	---------------	----------	---



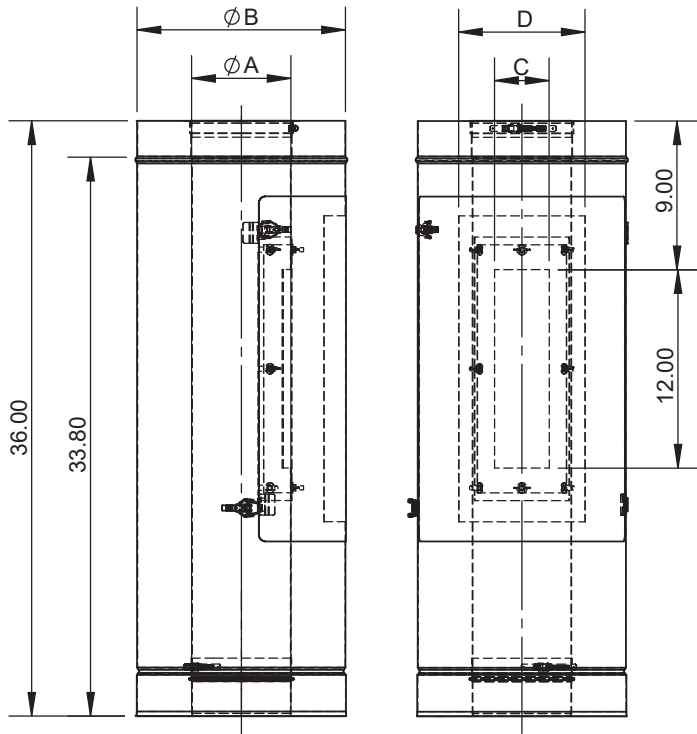
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
lb	42.04	46.51	51.00	55.46	59.93	64.42	68.88	73.35	77.84	86.79

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
lb	95.74	104.68	113.63	122.58	131.54	140.47	149.42	158.38	167.33	176.26



*FLANGE SUPPORT BANDS INCLUDED
*INCLUDES 1 CUT LENGTH LOCKING BAND

Jeremias Inc.	date 11/19/2020	drawn by JJR	model DWCK-ZC	code 36CL	description DWCKØ-36CL-ZC 36" Cut Pipe Length
---------------	-----------------	--------------	---------------	-----------	---



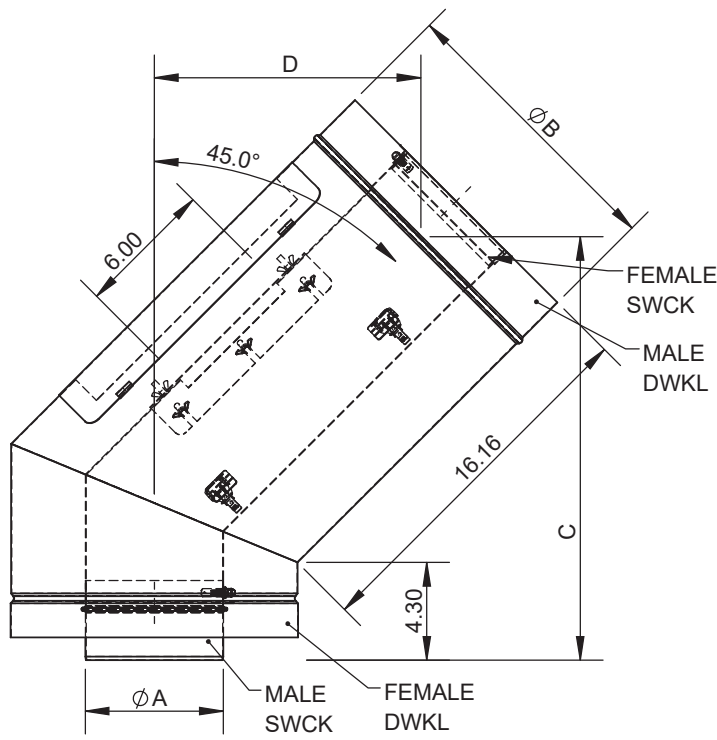
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
C	3.3	3.3	3.4	3.4	5.5	5.5	5.5	5.5	5.7	5.7
D	7.65	7.99	8.24	8.43	10.22	10.45	10.7	10.85	10.98	11.19
lb	45.21	49.50	53.86	58.19	62.99	67.34	71.70	76.10	80.54	89.39

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
C	5.8	8.7	8.8	8.8	10.7	10.8	10.8	13.7	13.8	13.8
D	11.34	13.92	14.09	14.22	15.86	16.08	17.46	19.3	19.42	20.13
lb	98.25	107.47	116.36	125.25	134.35	143.26	152.24	161.39	170.30	179.23



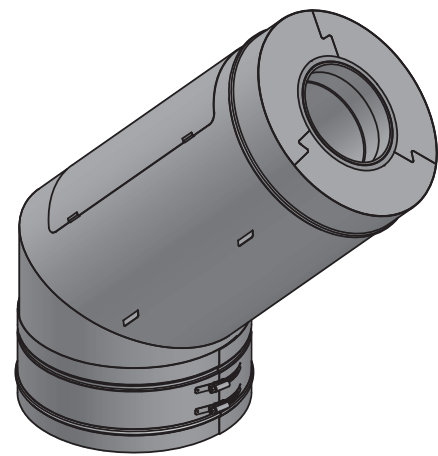
*FLANGE SUPPORT BANDS INCLUDED
 *INCLUDES 1 LOCKING BANDS

Jeremias Inc.	date 12/2/2020	drawn by JJR	model DWCK-ZC	code IAD	description DWCKØ-IAD-ZC Inline Access Door Length
---------------	-------------------	-----------------	------------------	-------------	--



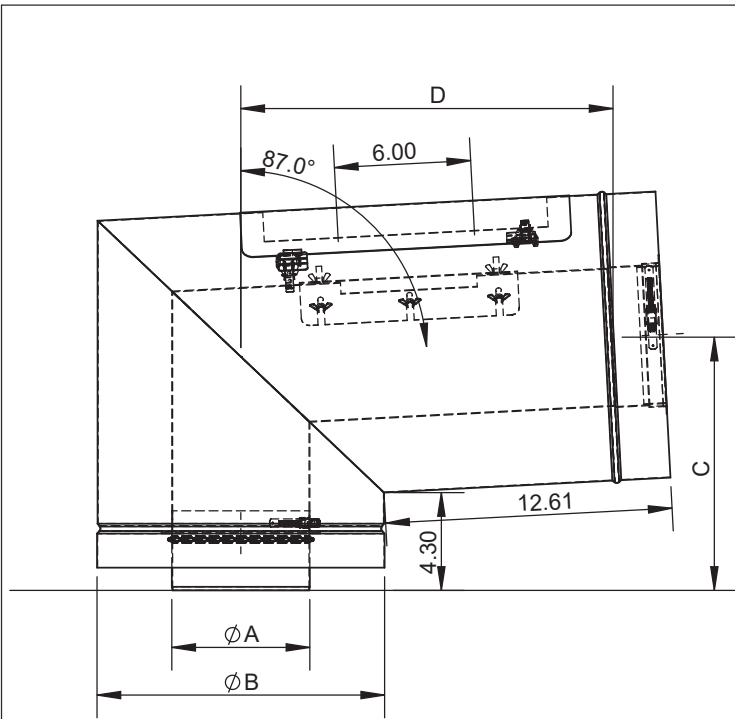
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
C	18.63	18.98	19.34	19.69	20.05	20.4	20.75	21.11	21.46	22.17
D	11.72	11.87	12.01	12.16	12.31	12.45	12.6	12.74	12.89	13.18
lb	17.89	19.95	22.07	24.24	26.53	28.82	31.15	33.55	35.99	41.03

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
C	22.87	23.58	24.29	25	25.7	26.41	27.12	27.82	28.53	29.24
D	13.48	13.77	14.06	14.36	14.65	14.94	15.23	15.53	15.82	16.11
lb	46.27	51.79	53.99	63.34	69.45	75.75	82.21	88.99	95.90	103.00



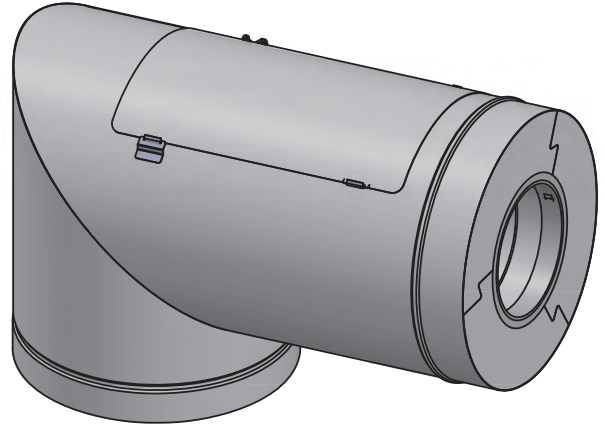
*FLANGE SUPPORT BANDS INCLUDED
 *INCLUDES 1 LOCKING BAND

Jeremias Inc.	date 11/16/2020	drawn by JJR	model DWCK-ZC	code 45EA	description DWCKØ-45EA-ZC 45 Degree Elbow w/ Access
---------------	--------------------	-----------------	------------------	--------------	---



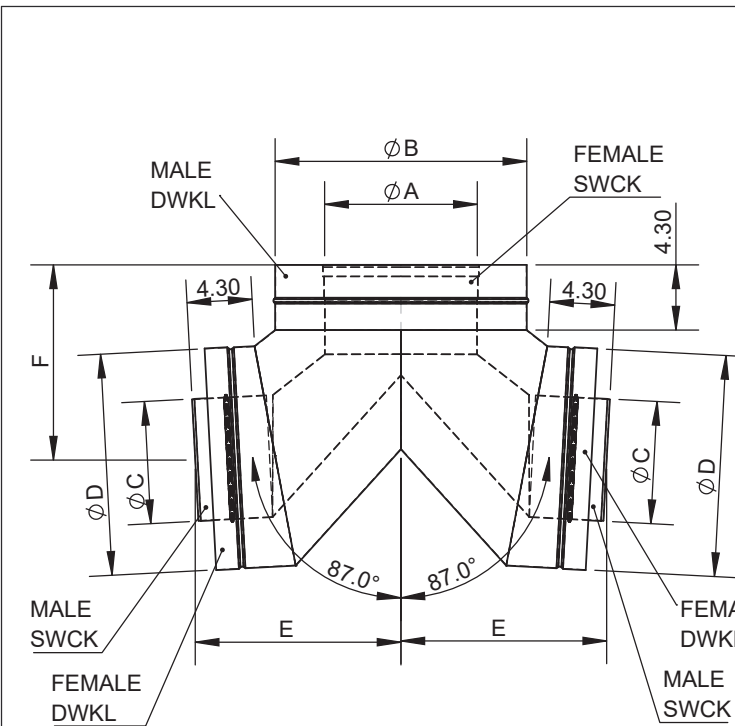
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
C	11.14	11.64	12.14	12.64	13.14	13.64	14.14	14.64	15.14	16.13
D	16.37	16.85	17.32	17.79	18.27	18.74	19.22	19.69	20.16	21.11
lb	33.70	38.32	43.19	48.25	53.66	59.18	64.90	70.86	77.04	90.09

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
C	17.13	18.13	19.13	20.13	21.13	22.13	23.12	24.12	25.12	26.12
D	22.06	23.01	23.95	24.9	25.85	26.8	27.74	28.69	29.64	30.59
lb	103.99	118.98	134.68	151.29	168.89	187.29	206.58	226.91	247.96	269.94



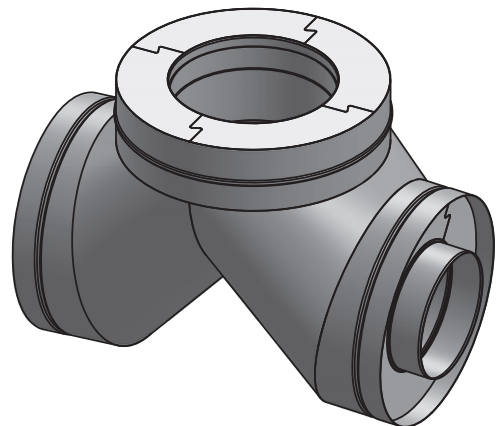
*FLANGE SUPPORT BANDS INCLUDED
*INCLUDES 1 LOCKING BAND

Jeremias Inc.	date 11/18/2020	drawn by JJR	model DWCK-ZC	code 87EA	description DWCKØ-87EA-ZC 87 Degree Elbow w/ Access
---------------	-----------------	--------------	---------------	-----------	---



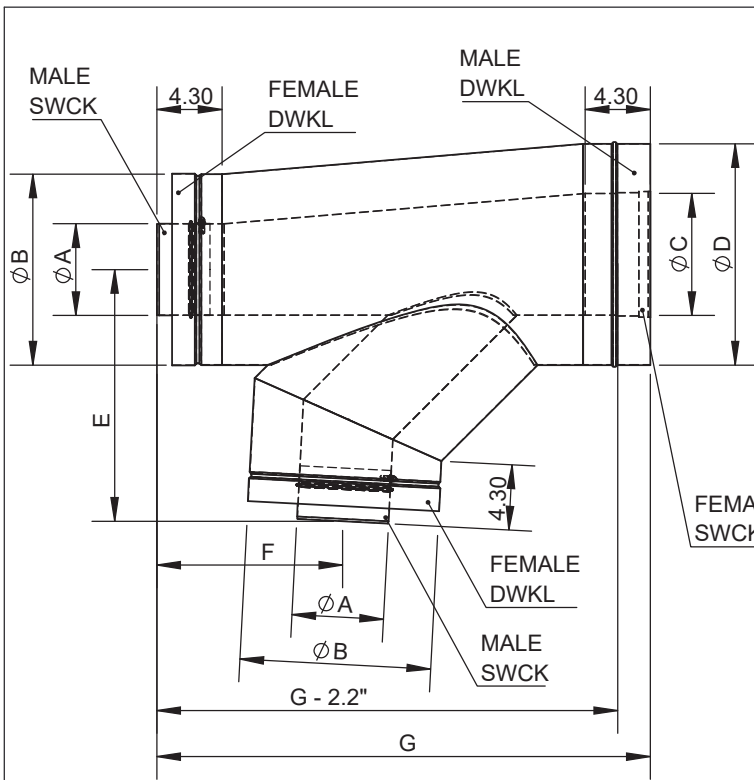
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
C	Customer Dimension									
D	Customer Dimension									
E	Customer Dimension									
F	Customer Dimension									

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
C	Customer Dimension									
D	Customer Dimension									
E	Customer Dimension									
F	Customer Dimension									



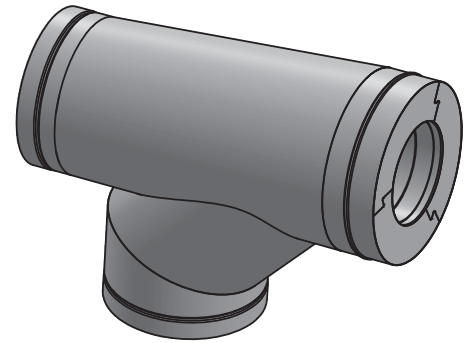
*FLANGE SUPPORT BANDS INCLUDED
*INCLUDES 2 LOCKING BANDS

Jeremias Inc.	date 11/17/2020	drawn by JJR	model DWCK-ZC	code 87BHT	description DWCKØ-87BHT-ZC 87 Degree Bullhead Tee
---------------	-----------------	--------------	---------------	------------	---



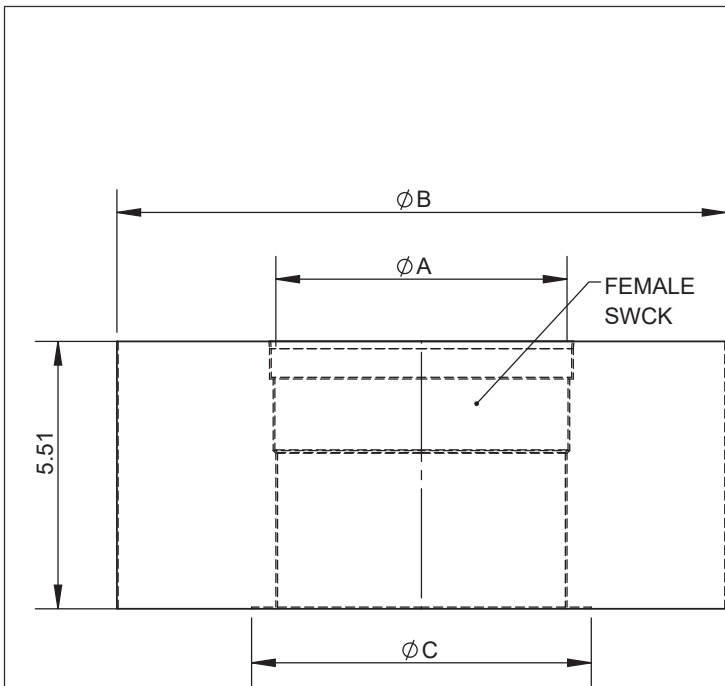
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
C	Customer Dimension									
D	Customer Dimension									
E	Customer Dimension									
F	Customer Dimension									
G	Customer Dimension									

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
C	Customer Dimension									
D	Customer Dimension									
E	Customer Dimension									
F	Customer Dimension									
G	Customer Dimension									



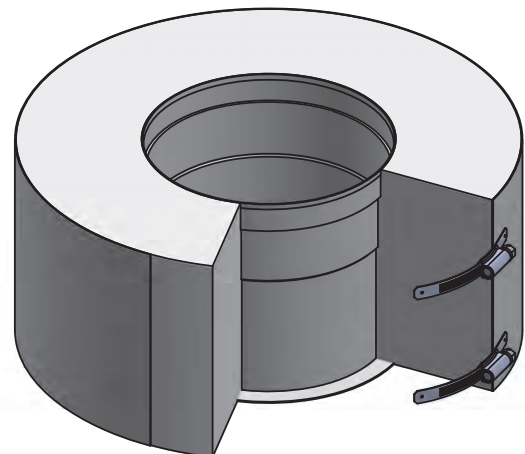
*FLANGE SUPPORT BANDS INCLUDED
*INCLUDES 2 LOCKING BANDS

Jeremias Inc.	date 11/17/2020	drawn by JJR	model DWCK-ZC	code 87IBT	description DWCKØ-87IBT-ZC 87 Degree Increasing Boot Tee
---------------	-----------------	--------------	---------------	------------	--



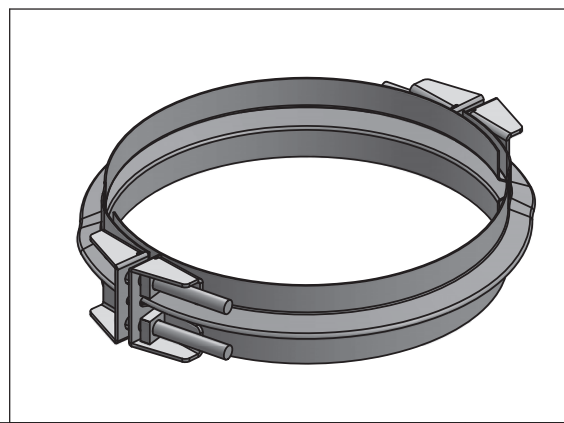
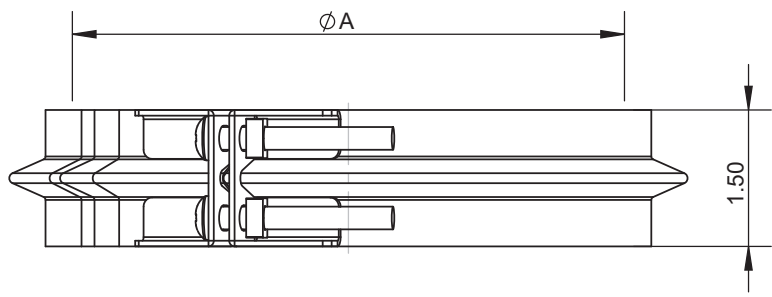
Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
C	7.07	8.07	9.07	10.07	11.07	12.07	13.07	14.07	15.07	17.07
lb	5.81	6.45	7.08	7.72	8.36	9.00	9.64	10.27	10.91	12.17

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
C	19.07	21.07	23.07	25.07	27.07	29.07	31.07	33.07	35.07	37.07
lb	13.44	14.72	15.99	17.27	18.55	19.80	21.08	22.35	23.63	24.90

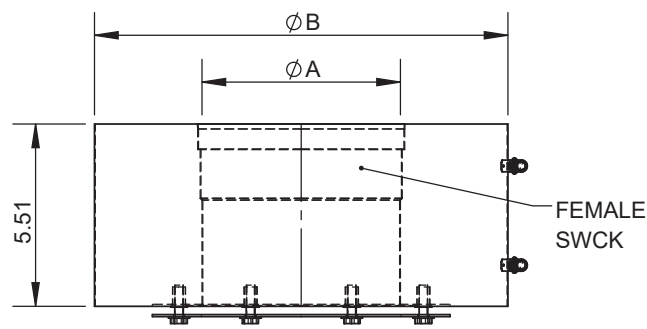


Jeremias Inc.	date 11/17/2020	drawn by JJR	model DWCK-ZC	code FCS	description DWCKØ-FCS-ZC Flange Collar - Start
---------------	-----------------	--------------	---------------	----------	--

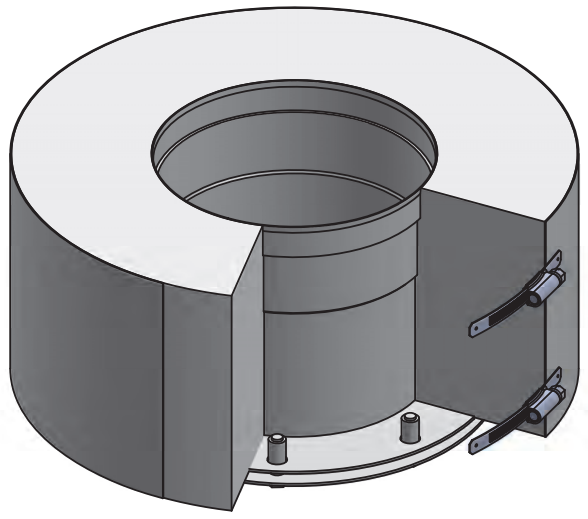
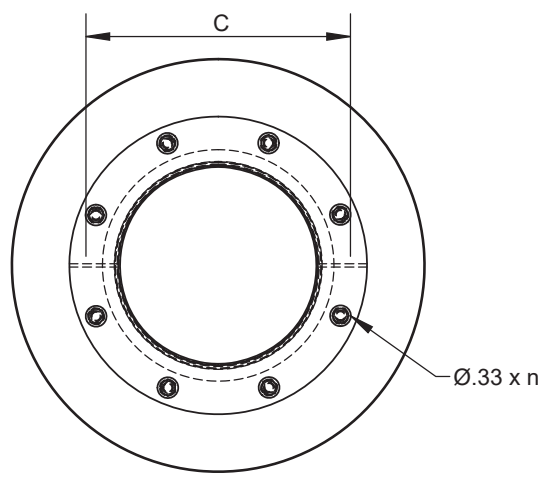
Ø	5	6	7	8	9	10	11	12	13	14	
A	5	6	7	8	9	10	11	12	13	14	
lb	0.36	0.41	0.47	0.52	0.57	0.62	0.67	0.72	0.77	0.82	
Ø	16	18	20	22	24	26	28	30	32	34	36
A	16	18	20	22	24	26	28	30	32	34	36
lb	0.92	1.02	1.13	1.23	1.33	1.43	1.53	1.63	1.73	1.84	1.94



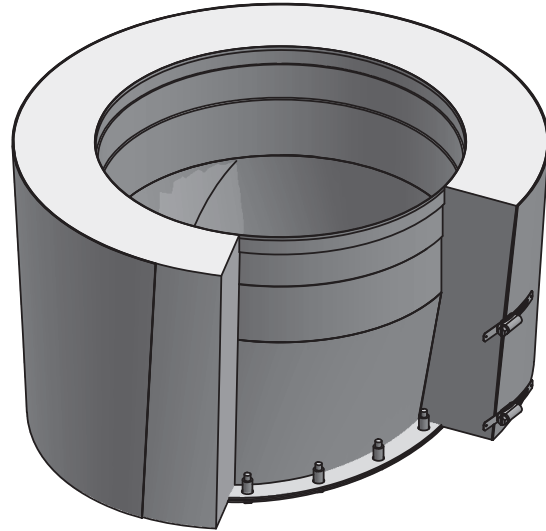
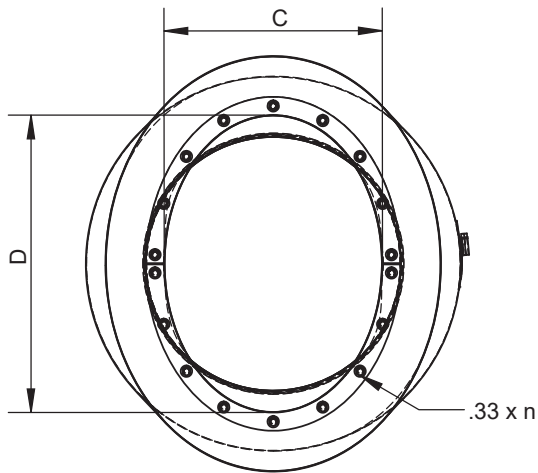
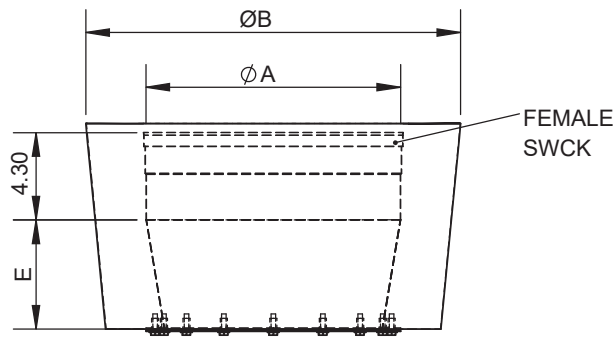
Jeremias Inc.	date 9/21/2020	drawn by JJR	model ALL	code VB	description SWFLØ-VB Vee-Band
---------------	----------------	--------------	-----------	---------	-------------------------------



Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
C	8.07	9.07	10.07	11.07	12.07	13.07	14.07	15.07	16.07	18.07
n	8		10		12		14		16	
lb	7.28	8.07	8.87	9.72	10.52	11.40	12.19	13.05	13.84	15.49

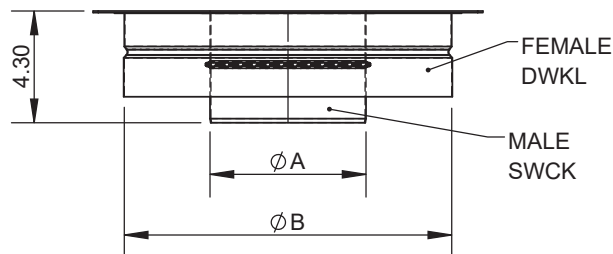
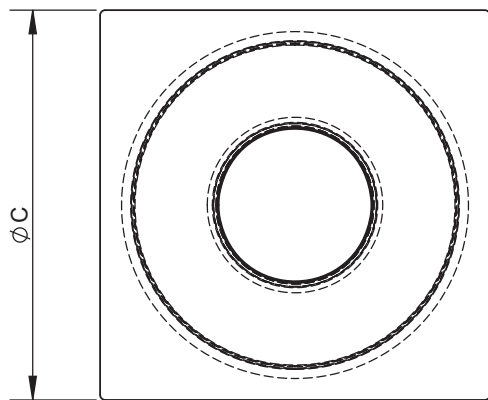


Jeremias Inc.	date 11/24/2020	drawn by JJR	model DWCK-ZC	code NWHA	description DWCKØ-NWHA-ZC No Weld Hood Adapter - Start
---------------	-----------------	--------------	---------------	-----------	--



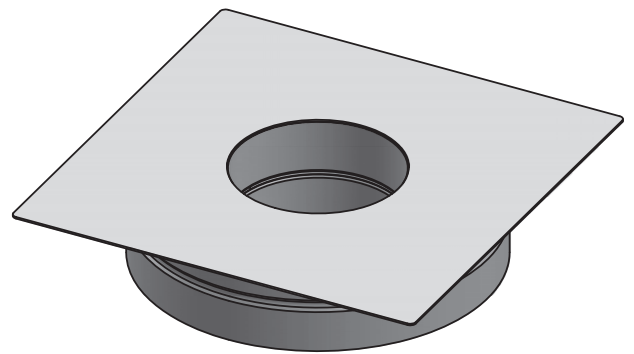
Ø	14	16	18	20
A	14	16	18	20
B	20.5	22.5	24.5	26.5
C	12			
D	16.35	21.3	26.25	31.2
E	7	10	13	16
n	18	18	22	22
lb	25.19	35.42	47.39	60.48

Jeremias Inc.	date 12/9/2020	drawn by JJR	model DWCK-ZC	code NWHO	description DWCKØ-NWHO-ZC No Weld Hood Adapter Oval - Start
---------------	-------------------	-----------------	------------------	--------------	---



Ø	6	7	8	9	10	11	12	13	14	16
A	6	7	8	9	10	11	12	13	14	16
B	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	22.5
C	29									
lb	19.62	19.95	20.24	20.53	20.77	20.99	21.19	21.34	21.47	21.67

Ø	18	20	22	24	26	28	30	32	34	36
A	18	20	22	24	26	28	30	32	34	36
B	24.5	26.5	28.5	30.5	32.5	34.5	36.5	38.5	40.5	42.5
C	36			42			48			
lb	29.79	29.74	29.61	29.35	37.25	36.78	36.19	45.03	44.22	43.30



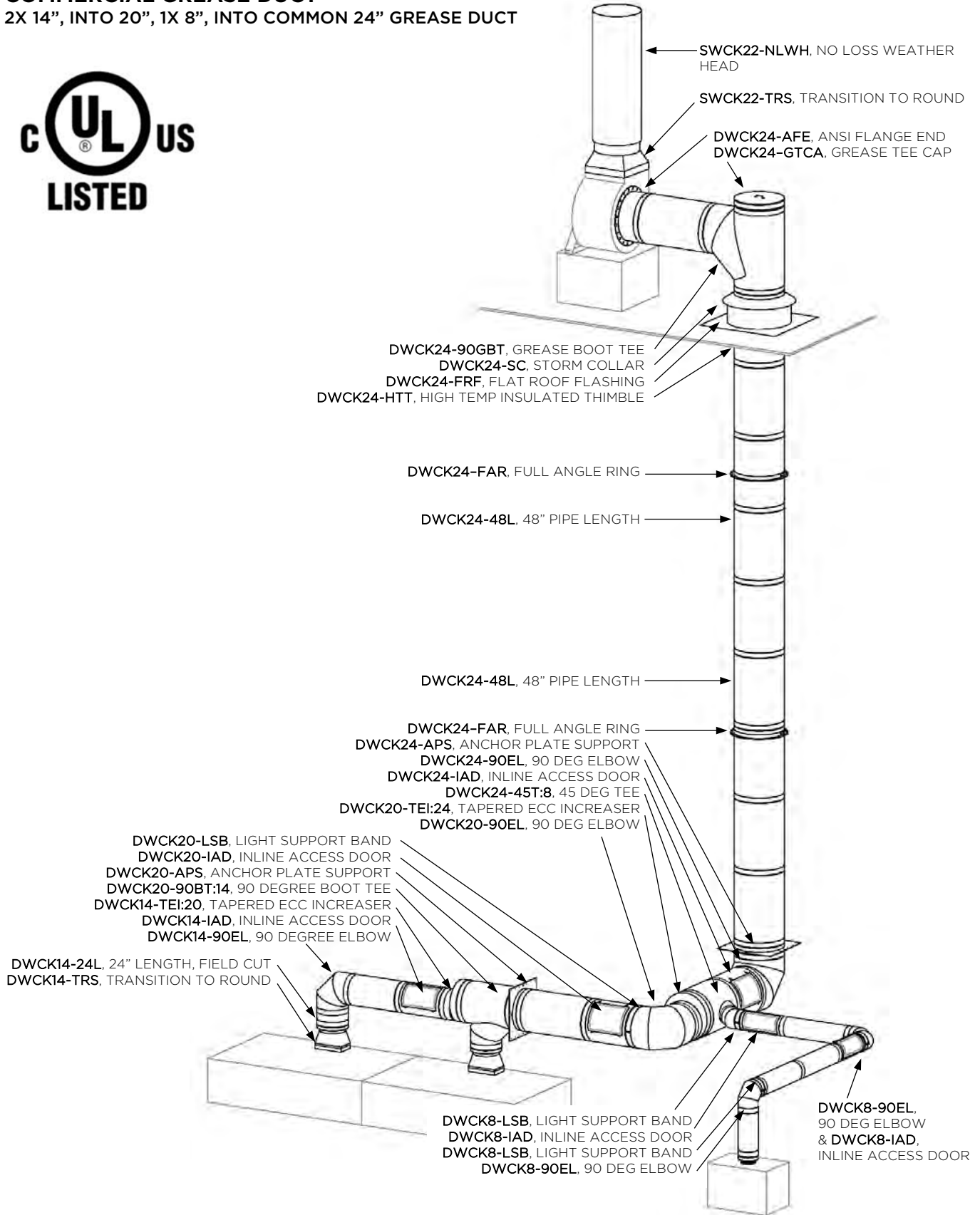
*INCLUDES 1 LOCKING BAND

Jeremias Inc.	date 12/14/2020	drawn by JJR	model DWCK-ZC	code FPE	description DWCKØ-FPE-ZC Fan Plate Adapter - End
---------------	--------------------	-----------------	------------------	-------------	--

SAMPLE SYSTEMS

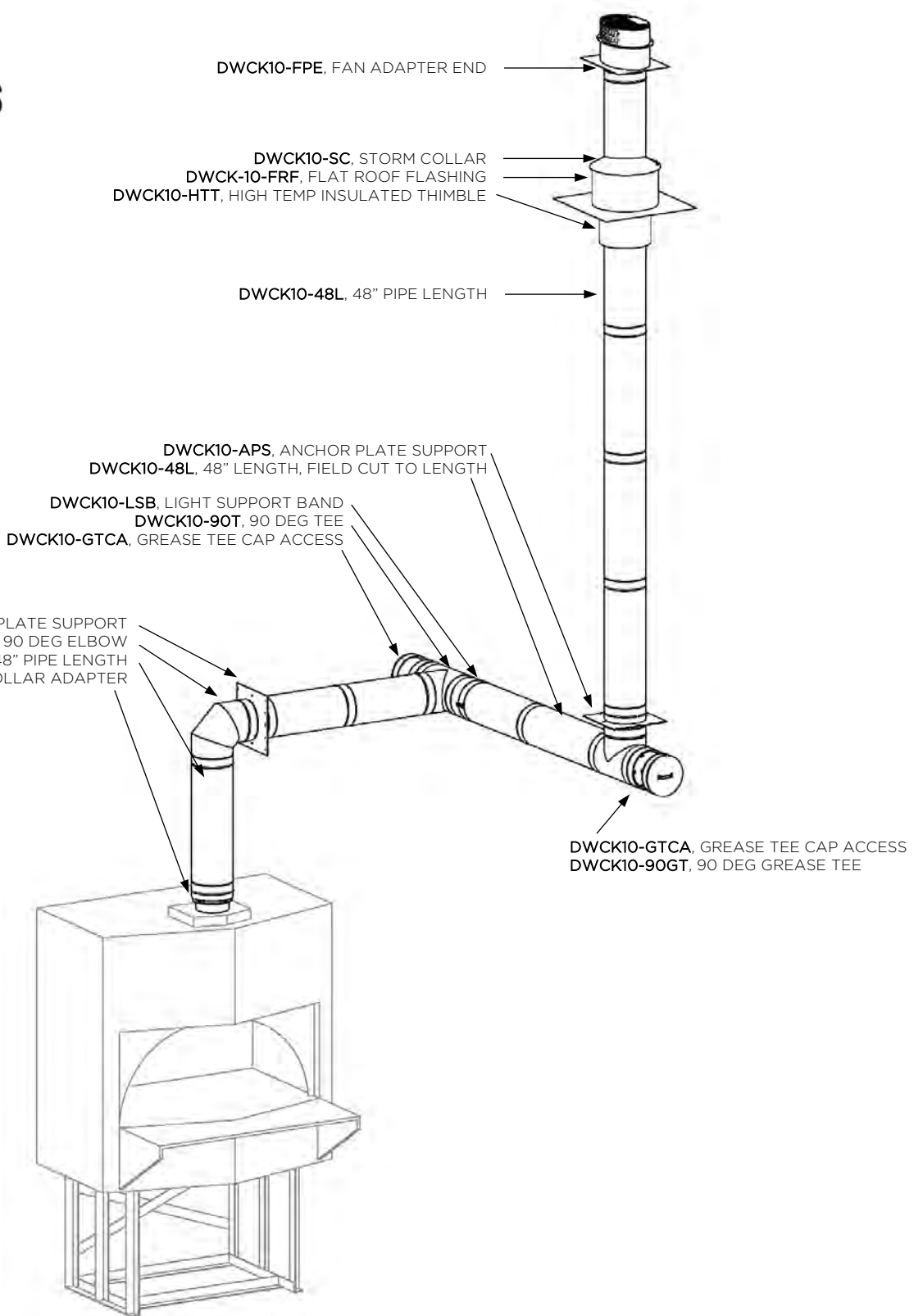
COMMERCIAL GREASE DUCT

2X 14", INTO 20", 1X 8", INTO COMMON 24" GREASE DUCT



SAMPLE SYSTEMS

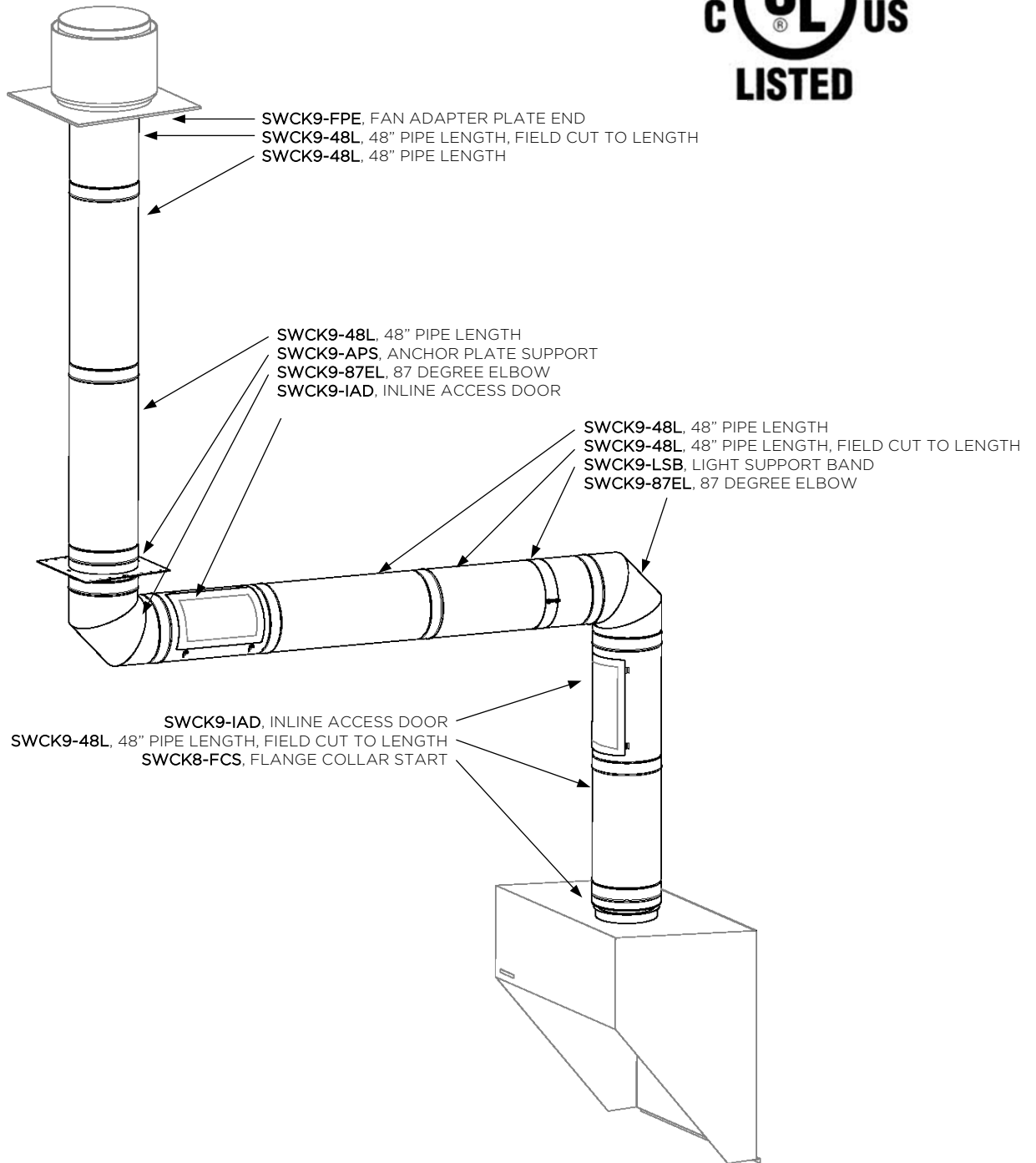
PIZZA OVEN CHIMNEY & GREASE DUCT 10" I.D. CHIMNEY AND GREASE DUCT



SAMPLE SYSTEMS

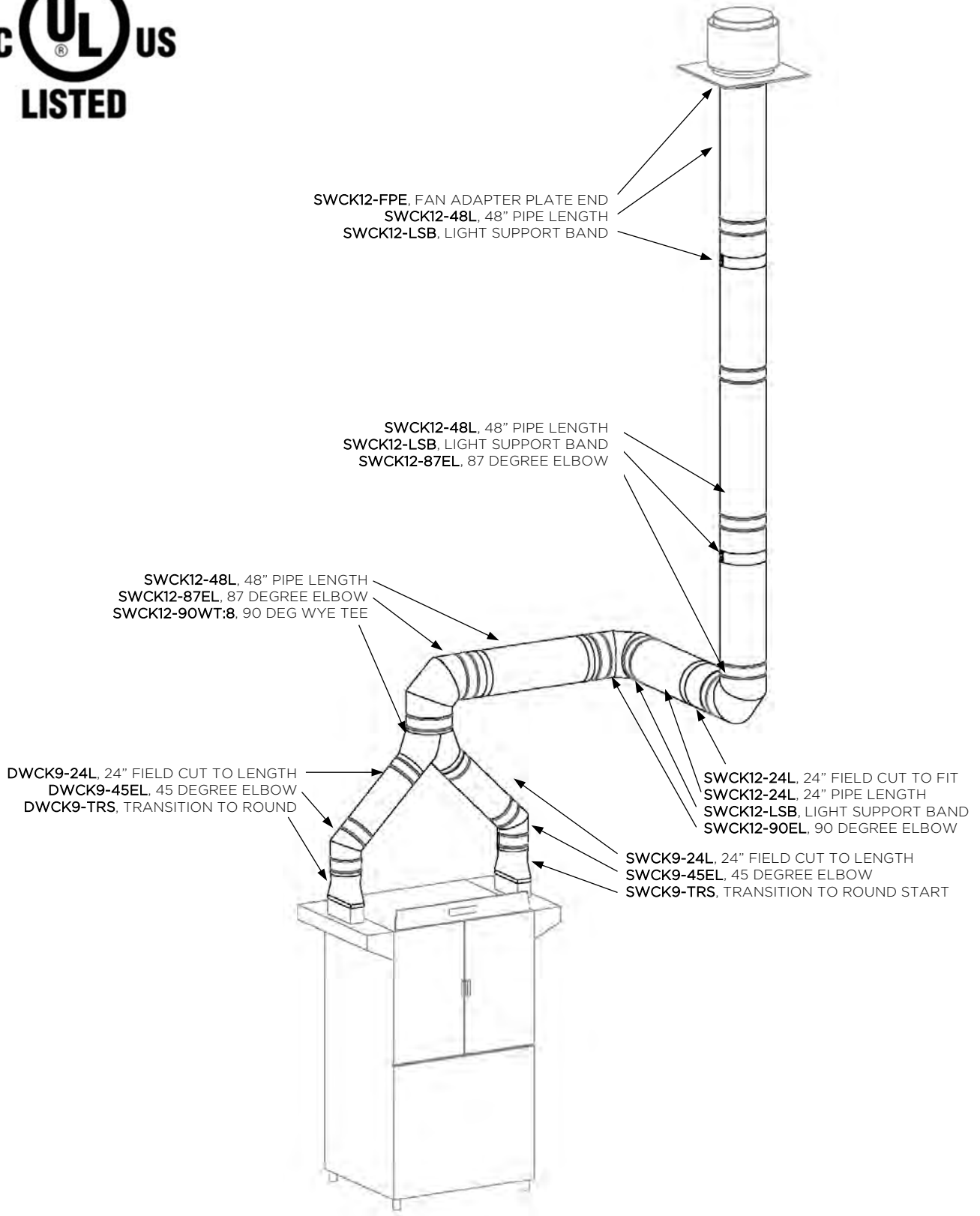
STAND-ALONE RESTAURANT EXHAUST

9" I.D. SWCK Grease Duct from Wall Mounted Type I Hood



SAMPLE SYSTEMS

COMMERCIAL DISHWASHER EXHAUST 2X 8" INTO 12" I.D. DISHWASHER EXHAUST



WARRANTY STATEMENT – Grease Ducts

I. 1-Year Limited Warranty

Jeremias Inc. (“Jeremias”) provides a 1-year limited warranty (“1-Year Limited Warranty”) for its Grease Ducts systems; KL, GD, FL, and CK Series (collectively, the “Products”) for any defect in workmanship or materials under normal use from the date of shipment to the purchaser of Products (“Purchaser”), subject to the following conditions:

- Product sizing and specifications have been performed in accordance with generally accepted engineering practices.
- Correct installation and maintenance in full compliance with Jeremias’ installation and maintenance instructions as published at the time of installation.

II. Limited Lifetime Warranty for Grease Ducts

Jeremias provides for an extended limited lifetime warranty (“Limited Lifetime Warranty”) for any defect in workmanship or materials under normal use from the date of shipment to the Purchaser, subject to the satisfaction of the following conditions:

- Products must have been designed and sized by Jeremias’ personnel.
- Availability of a written inspection report from the time of installation, or timely thereafter, by a Jeremias inspector or an inspector authorized by Jeremias, that the Product assembly and installation conformed to all of Jeremias’ assembly and installation instructions.
- Products were at all times operated and maintained in full compliance with Jeremias’ operation and maintenance instructions as published at the time of installation or as later provided to Purchaser by Jeremias.

For a period of ten (10) years from original installation, Jeremias will provide replacement product to the original owner for the product proven defective with a similar or like quantity of available Jeremias product, free of charge.

From the eleventh (11) through fifteen (15) years Jeremias will provide replacement product to the original owner at a cost of 75% off of the Manufacturers Suggested List Price in effect on the date the claim is received.

At expiration of the fifteen (15) year term, Jeremias will provide replacement product to the original owner at a cost of 50% off of the Manufacturers Suggested List Price in effect on the date the claim is received.

III. Exclusion of Limited Warranty

The 1-Year Limited Warranty and the Limited Lifetime Warranty (collectively the “Limited Warranty”) shall not cover (i) damages to: wear parts, e.g. seals; demonstration units; paintwork; moving parts, including but not limited to compensators, flue gas dampers, draught regulators, chimney, doors; flexible piping; insulation; consumables, such as granulates; minor Product deviations which do not effect functionality; or (ii) damages caused by: contamination of ambient air or combustion air by chlorinated hydrocarbons or other vapors which may cause excessively severe acid condensate to form within the Products; merchandise provided by other manufacturers; installation, transport or commissioning; Purchaser, an installer or other third parties; normal wear and tear; any party other than Jeremias in a willful manner; force majeure, including, but not limited to flood, fire or frost; non-compliance with the assembly, installation, operation and maintenance instructions available at www.JeremiasInc.com; assembly, installation, maintenance or repair by unqualified personnel; improper commissioning; use of Products not in accordance with their intended purpose; exposure of Products to any metals of an inferior quality; contamination of the Products between unpacking and assembly; burning of wood other than unpainted, natural wood, which has been stored for at least 3 years and which moisture level does not exceed 20%; or burning of chipboard or domestic waste.

IV. Remedies

If a valid Limited Warranty claim arises, Jeremias shall, at its sole discretion, either repair the Product or deliver a properly functioning Product. This Limited Warranty is limited to repair or replacement of the Product plus shipping cost to the location of the defective Product. The Limited Warranty does not cover labor costs for removal or replacement of the defective Product, unless such labor shall be carried out by Jeremias itself in its sole discretion.

V. Filing of a Limited Warranty Claim

Limited Warranty claims may only be asserted during the term of the applicable Limited Warranty period. Any extension of the term of the Limited Warranties shall be excluded, regardless of the legal basis. If Purchaser believes that there is a justified Limited Warranty claim, Purchaser shall notify Jeremias to that effect in writing. Any claims stemming from or relating to a Limited Warranty shall be asserted in detail within eight weeks after the discovery of the defect (the time when the notification is received by Jeremias will be the basis for determining whether a claim has been reported within this deadline) or else shall be excluded and not be recognized by Purchaser. Such notification shall include a description of the defect, original proof of purchase, and a copy of the written inspection report as described in Section II above (if applicable).

VI. No Other Warranty

EXCEPT AS SET FORTH EXPRESSLY THEREIN, JEREMIAS MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, REGARDING THE PRODUCTS, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

VII. Damages Disclaimer and Limitation

IN NO EVENT SHALL JEREMIAS BE LIABLE TO ANY CLIENT OR ANY OTHER PERSON FOR ANY (A) INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING LOSS OF PROFIT OR GOODWILL OR (B) DIRECT DAMAGES TO BODY, HEALTH OR PROPERTY FOR ANY MATTER ARISING OUT OF OR RELATING TO THE PRODUCTS, WHETHER SUCH LIABILITY IS ASSERTED ON THE BASIS OF CONTRACT, TORT OR OTHERWISE EVEN IF JEREMIAS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL JEREMIAS’ TOTAL AGGREGATE LIABILITY FOR DAMAGES EXCEED THE GREATER OF (A) TOTAL COMPENSATION PAID BY PURCHASER TO JEREMIAS FOR THE PRODUCTS, OR (B) PROCEEDS AVAILABLE FROM ANY INSURANCE POLICY IN EFFECT AND APPLICABLE TO THE EVENT GIVING RISE TO SUCH LIABILITY.

VIII. Notice

Any notice or other communication hereunder to Jeremias shall be sent postage prepaid, by certified mail, by courier such as United Parcel Service or e-mail, to the following: Jeremias Inc., 983 Industrial Park Drive, Marietta, GA 30062, E-mail: Info@JeremiasInc.com. Notices shall be effective upon receipt.

IX. Terms and Conditions of Sale

Purchaser’s Terms and Conditions of Sale as currently in effect shall govern these Limited Warranties, including without limitation the rights and responsibilities granted hereunder.

WARRANTY STATEMENT - Chimney Systems

I. 1-Year Limited Warranty

Jeremias Inc. ("Jeremias") provides a 1-year limited warranty ("1-Year Limited Warranty") for its Chimney Systems; KL, HT, FL, and CK Series (collectively, the "Products") for any defect in workmanship or materials under normal use from the date of shipment to the purchaser of Products ("Purchaser"), subject to the following conditions:

- Product sizing and specifications have been performed in accordance with generally accepted engineering practices.
- Correct installation and maintenance in full compliance with Jeremias' installation and maintenance instructions as published at the time of installation.

II. Extended 25-Year Limited Warranty

Jeremias provides for an extended 25-year limited warranty ("25-Year Limited Warranty") for any defect in workmanship or materials under normal use from the date of shipment to the Purchaser, subject to the satisfaction of the following conditions:

- Products must have been designed and sized by Jeremias' personnel.
- Availability of a written inspection report from the time of installation, or timely thereafter, by a Jeremias inspector or an inspector authorized by Jeremias, that the Product assembly and installation conformed to all of Jeremias' assembly and installation instructions.
- Products were at all times operated and maintained in full compliance with Jeremias' operation and maintenance instructions as published at the time of installation or as later provided to Purchaser by Jeremias.

III. Exclusion of Limited Warranty

The 1-Year Limited Warranty and the 25-Year Limited Warranty (collectively the "Limited Warranty") shall not cover (i) damages to: wear parts, e.g. seals; demonstration units; paintwork; moving parts, including but not limited to compensators, flue gas dampers, draught regulators, chimney, doors; flexible piping; insulation; consumables, such as granulates; minor Product deviations which do not effect functionality; or (ii) damages caused by: contamination of ambient air or combustion air by chlorinated hydrocarbons or other vapors which may cause excessively severe acid condensate to form within the Products; merchandise provided by other manufacturers; installation, transport or commissioning; Purchaser, an installer or other third parties; normal wear and tear; any party other than Jeremias in a willful manner; force majeure, including, but not limited to flood, fire or frost; non-compliance with the assembly, installation, operation and maintenance instructions available at www.JeremiasInc.com; assembly, installation, maintenance or repair by unqualified personnel; improper commissioning; use of Products not in accordance with their intended purpose; exposure of Products to any metals of an inferior quality; contamination of the Products between unpacking and assembly; burning of wood other than unpainted, natural wood, which has been stored for at least 3 years and which moisture level does not exceed 20%; or burning of chipboard or domestic waste.

IV. Remedies

If a valid Limited Warranty claim arises, Jeremias shall, at its sole discretion, either repair the Product or deliver a properly functioning Product. This Limited Warranty is limited to repair or replacement of the Product plus shipping cost to the location of the defective Product. The Limited Warranty does not cover labor costs for removal or replacement of the defective Product, unless such labor shall be carried out by Jeremias itself in its sole discretion.

V. Filing of a Limited Warranty Claim

Limited Warranty claims may only be asserted during the term of the applicable Limited Warranty period. Any extension of the term of the Limited Warranties shall be excluded, regardless of the legal basis. If Purchaser believes that there is a justified Limited Warranty claim, Purchaser shall notify Jeremias to that effect in writing. Any claims stemming from or relating to a Limited Warranty shall be asserted in detail within eight weeks after the discovery of the defect (the time when the notification is received by Jeremias will be the basis for determining whether a claim has been reported within this deadline) or else shall be excluded and not be recognized by Purchaser. Such notification shall include a description of the defect, original proof of purchase, and a copy of the written inspection report as described in Section II above (if applicable).

VI. No Other Warranty

EXCEPT AS SET FORTH EXPRESSLY THEREIN, JEREMIAS MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, REGARDING THE PRODUCTS, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

VII. Damages Disclaimer and Limitation

IN NO EVENT SHALL JEREMIAS BE LIABLE TO ANY CLIENT OR ANY OTHER PERSON FOR ANY (A) INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING LOSS OF PROFIT OR GOODWILL OR (B) DIRECT DAMAGES TO BODY, HEALTH OR PROPERTY FOR ANY MATTER ARISING OUT OF OR RELATING TO THE PRODUCTS, WHETHER SUCH LIABILITY IS ASSERTED ON THE BASIS OF CONTRACT, TORT OR OTHERWISE EVEN IF JEREMIAS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL JEREMIAS' TOTAL AGGREGATE LIABILITY FOR DAMAGES EXCEED THE GREATER OF THE AMOUNT OF (A) TOTAL COMPENSATION PAID BY PURCHASER TO JEREMIAS FOR THE PRODUCTS, OR (B) PROCEEDS AVAILABLE FROM ANY INSURANCE POLICY IN EFFECT AND APPLICABLE TO THE EVENT GIVING RISE TO SUCH LIABILITY.

VIII. Notice

Any notice or other communication hereunder to Jeremias shall be sent postage prepaid, by certified mail, by courier such as United Parcel Service or e-mail, to the following: Jeremias Inc., 983 Industrial Park Drive, Marietta, GA 30062, E-mail: Info@JeremiasInc.com. Notices shall be effective upon receipt.

IX. Terms and Conditions of Sale

Purchaser's Terms and Conditions of Sale as currently in effect shall govern these Limited Warranties, including without limitation the rights and responsibilities granted hereunder.

