



**GE APPLIANCES**

# Product Specifications

## NCDC\*5S DOWNFLOW COILS

### RESIDENTIAL PRODUCT SPECIFICATIONS

- Downflow / Cased
- Total Corrosion Technology Designed Coil
- TXV Furnished
- R- 454B
- 60Hz
- 2 to 5 Tons



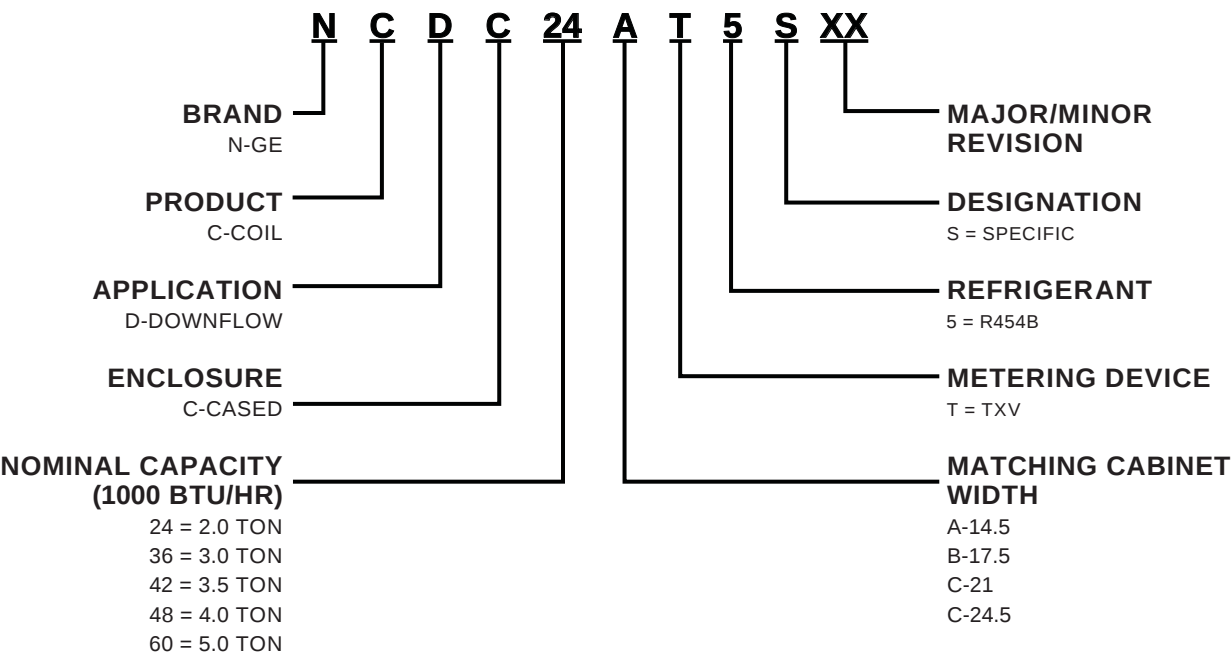
**READ CAREFULLY.  
KEEP THESE INSTRUCTIONS.**

# NCDC\*5S

## PRODUCT SPECIFICATIONS

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### MODEL NUMBER GUIDE



## **APPROVALS**

- Tested with matching air conditioners and heat pump units in accordance with AHRI Standard 210/240-2023
- AHRI Certified system match-ups and expanded ratings, visit **AHRIDirectory.org**
- Air resistance tests from air test chamber

## **APPLICATIONS**

- 2 to 5 ton nominal sizes
- Downflow indoor coils can easily be installed with most branded downflow furnaces
- Factory installed R-454B, check/expansion valve

## **ZONING APPLICATIONS**

- Units can be used with certain zoning systems
- Zone control panel **MUST** be able to interface and communicate with the variable speed motor in the unit

## **REFRIGERANT SYSTEM**

### **Total Corrosion Technology Designed Coil**

- Aluminum tubing, hairpins, distributor and header tubes
- Copper refrigerant sweat connections on both liquid and suction lines for easy brazing
- Ripple-edged aluminum fins
- Lanced fins provide maximum exposure of fin surface to air stream
- Axial grooved tubing provides superior heat transfer
- Twin coil construction assembled in an “A” configuration for large surface area
- High pressure testing insures leak-proof construction

### **Refrigerant Line Connections**

- Copper refrigerant sweat connections on both liquid and suction lines for easy brazing
- Lines extend outside of the cabinet for ease of connection
- See dimension drawings for locations

### **Braze-Free/Press Fitting Flexibility**

- Units can accommodate braze-free or press fittings for installation versatility

### **Anti-Microbial Drain Pans**

- Non-corrosive, UV-resistant polymer drain pan with dual FPT drain connections
- Anti-Microbial additive resists growth of mold and mildew on drain pan which improves indoor air quality and reduces drain line blockage

### **R-454B Check/Expansion Valve**

- All models have a factory-installed, internal check/ expansion valve
- For use with R-454B systems
- Wide range valve
- Chatleff style fitting
- Expansion valves are externally-equalized, non-bleed port type

## **LOW GWP REFRIGERANT DETECTION SYSTEM**

- Consists of an RDS detection sensor on the coil and a RDS control in the furnace
- Required for all systems using R-454B refrigerant

**NOTE - Furnaces with a factory installed RDS control** - The RDS control is integral to the furnace ignition control board.

**Furnaces without a RDS control** - The Refrigerant Detection System (RDS) Blower Control Board is required and must be ordered separately for field installation. See below for description and features.

### **Refrigerant Detection System (RDS) Coil Sensor**

- Factory installed on all indoor coils
- Complies with UL 60335-2-40 approved standard
- Required for all systems using R-454B refrigerant
- Sensor ensures safe operation for systems equipped with R-454B refrigerant
- Indoor sensor will detect any R-454B refrigerant

## **Optional Accessories**

### **Refrigerant Detection System (RDS) Blower Control Board**

**NOTE** - For furnaces manufactured without the RDS Blower Control Board.

- Connects to the RDS sensor furnished with the coil

### **Non-Communicating Blower Control Board**

- Non-Communicating Blower Control Board and Sensor can be used with any non-communicating 24 volt furnace

### **Standard Features**

- Connects to the RDS sensor furnished with the coil
- Supports up to two RDS Sensors (factory setting)
- Used as interface between indoor unit and thermostat to control system
- Ensures safe operation for systems equipped with R-454B refrigerant
- If R-454B refrigerant is detected the refrigerant detection system will prevent compressor and heating operation until R-454B refrigerant is no longer detected
- Refrigeration detection system also energizes the blower if R-454B refrigerant is detected to dissipate any concentrations of refrigerant from the conditioned space
- Multi-color LED for system status and as an aid in troubleshooting
- Flashing LED codes for system status (Green/Blue) and diagnosing Sensor errors (Red)
- Alarm relay can trigger an external alarm if R-454B refrigerant is detected
- Zone relay opens all zone dampers (if part of a zoning system) if R-454B refrigerant is detected
- Power is disabled to non-communicating thermostats to prevent demand if R-454B refrigerant is detected
- On system start-up blower will run for five minutes and any thermostat demands are disabled
- Dimensions (H x W x D): 7-7/16 x 7-7/16 x 2-1/2 (189 x 189 x 127 mm)

**NOTE** - Refer to the Installation Instructions for additional information.

## **CABINET**

- Pre-painted cabinet finish
- Insulated with thick fiberglass insulation
- Coil slides out of cabinet for ease of servicing
- Flanges provided in outlet for ease of duct connection
- Removable panels provide access to coil
- Refrigerant lines extend outside of cabinet for easy installation Furnace Match-Up
- Coils exactly match corresponding furnaces with the same letter designation in model number
- No adaptor required
- Engaging holes furnished on cabinet for alignment with furnace

**NOTE** - "D" width coils do not match "C" width furnace width or openings. See Physical Matches drawing on page 6.

| OPTIONAL ACCESSORIES - ORDER SEPARATELY                                                                                                                                                                                                                 |                                   |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------|
| Description                                                                                                                                                                                                                                             |                                   | Order No. |
| Refrigerant Detection System (RDS) Blower Control Board                                                                                                                                                                                                 | Any Non-Communicating 24V Furnace | 27A05     |
| <b>NOTE</b> - Communicating Blower Control Board can be used universally with branded communicating furnace or any non-communicating 24 volt furnace.<br>Non-Communicating Blower Control Board can be used with any non-communicating 24 volt furnace. |                                   |           |

| SPECIFICATIONS                        |                                  |         |        |        |     |
|---------------------------------------|----------------------------------|---------|--------|--------|-----|
| Size                                  |                                  | 24A     | 24B    | 36B    | 36C |
| Nominal Tonnage                       |                                  | 2       | 2      | 3      | 3   |
| Refrigerant Type                      |                                  | R-454B  |        |        |     |
| Furnace Cabinet Matching Letter Width |                                  | A       | B      | B      | C   |
| Coil & Furnace Cabinet Width - in.    |                                  | 14-1/2  | 17-1/2 | 17-1/2 | 21  |
| Connections                           | Liquid line (OD) sweat - in.     | 3/8     |        |        |     |
|                                       | Suction line (OD) sweat - in.    | 7/8     |        |        |     |
|                                       | Condensate drain (FPT) - in.     | (2) 3/4 |        |        |     |
| Indoor Coil                           | Net face area - ft. <sup>2</sup> | 4.08    |        | 4.67   |     |
|                                       | Tube diameter - in.              | 3/8     |        |        |     |
|                                       | Rows                             | 3       |        |        |     |
|                                       | Fins - in.                       | 14      |        |        |     |
| Shipping Data - lbs.                  |                                  | 44      | 51     | 52     | 60  |

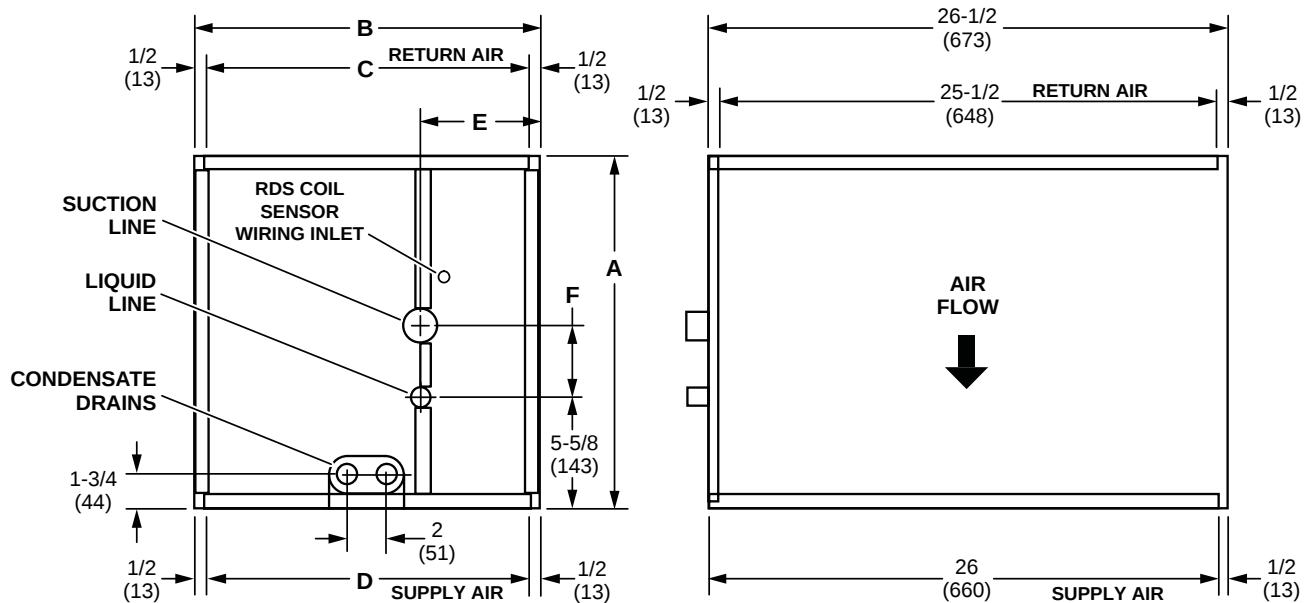
| SPECIFICATIONS                        |                                  |         |      |        |
|---------------------------------------|----------------------------------|---------|------|--------|
| Size                                  | 42B                              | 48C     | 60C  | 60D    |
| Nominal Tonnage                       | 3.5                              | 4       | 5    | 5      |
| Refrigerant Type                      | R-454B                           |         |      |        |
| Furnace Cabinet Matching Letter Width | B                                | C       | C    | D      |
| Coil & Furnace Cabinet Width - in.    | 17-1/2                           | 21      | 21   | 24-1/2 |
| Connections                           | Liquid line (OD) sweat - in.     | 3/8     |      |        |
|                                       | Suction line (OD) sweat - in.    | 7/8     |      |        |
|                                       | Condensate drain (FPT) - in.     | (2) 3/4 |      |        |
| Indoor Coil                           | Net face area - ft. <sup>2</sup> | 5.83    | 6.42 | 7.00   |
|                                       | Tube diameter - in.              | 3/8     |      |        |
|                                       | Rows                             | 3       |      |        |
|                                       | Fins - in.                       | 14      |      |        |
| Shipping Data - lbs.                  | 65                               | 69      | 71   | 75     |

## AIR RESISTANCE

| Model No. | Air Volume<br>cfm | Total Resistance |          |
|-----------|-------------------|------------------|----------|
|           |                   | Dry Coil         | Wet Coil |
|           |                   | in. w.g.         | in. w.g. |
| NCDC24A   | 400               | 0.08             | 0.09     |
|           | 600               | 0.16             | 0.18     |
|           | 800               | 0.29             | 0.33     |
|           | 1000              | 0.45             | 0.49     |
| NCDC24B   | 600               | 0.11             | 0.13     |
|           | 800               | 0.18             | 0.19     |
|           | 1000              | 0.27             | 0.29     |
|           | 1200              | 0.35             | 0.39     |
| NCDC36B   | 1400              | 0.47             | 0.51     |
|           | 600               | 0.10             | 0.12     |
|           | 800               | 0.15             | 0.18     |
|           | 1000              | 0.24             | 0.27     |
| NCDC36C   | 1200              | 0.32             | 0.36     |
|           | 1400              | 0.43             | 0.47     |
|           | 600               | 0.05             | 0.08     |
|           | 800               | 0.09             | 0.12     |
| NCDC36C   | 1000              | 0.13             | 0.17     |
|           | 1200              | 0.17             | 0.23     |
|           | 1400              | 0.24             | 0.30     |

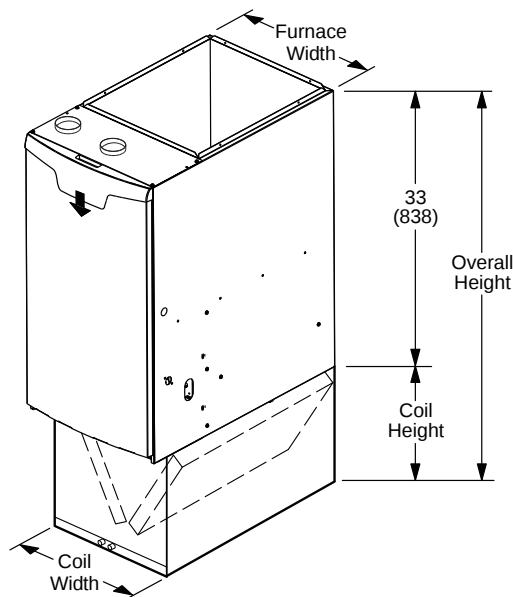
| Model No. | Air Volume<br>cfm | Total Resistance |          |
|-----------|-------------------|------------------|----------|
|           |                   | Dry Coil         | Wet Coil |
|           |                   | in. w.g.         | in. w.g. |
| NCDC42B   | 600               | 0.06             | 0.10     |
|           | 800               | 0.12             | 0.14     |
|           | 1000              | 0.18             | 0.22     |
|           | 1200              | 0.25             | 0.30     |
|           | 1400              | 0.34             | 0.39     |
|           | 1600              | 0.43             | 0.49     |
| NCDC48C   | 800               | 0.09             | 0.10     |
|           | 1000              | 0.11             | 0.13     |
|           | 1200              | 0.15             | 0.18     |
|           | 1400              | 0.21             | 0.23     |
|           | 1600              | 0.26             | 0.30     |
|           | 1800              | 0.34             | 0.37     |
| NCDC60C   | 2000              | 0.40             | 0.44     |
|           | 800               | 0.09             | 0.11     |
|           | 1000              | 0.12             | 0.14     |
|           | 1200              | 0.16             | 0.20     |
|           | 1400              | 0.22             | 0.24     |
|           | 1600              | 0.27             | 0.32     |
| NCDC60D   | 1800              | 0.33             | 0.38     |
|           | 2000              | 0.40             | 0.46     |
|           | 800               | 0.09             | 0.08     |
|           | 1000              | 0.13             | 0.13     |
|           | 1200              | 0.18             | 0.16     |
|           | 1400              | 0.16             | 0.21     |
| NCDC60D   | 1600              | 0.20             | 0.26     |
|           | 1800              | 0.24             | 0.32     |
|           | 2000              | 0.29             | 0.39     |

## UNIT DIMENSIONS - IN. (MM)



| SIZE    | A<br>(Height) |     | B<br>(Width) |     | C      |     | D      |     | E     |     | F      |     |
|---------|---------------|-----|--------------|-----|--------|-----|--------|-----|-------|-----|--------|-----|
|         | in.           | mm  | in.          | mm  | in.    | mm  | in.    | mm  | in.   | mm  | in.    | mm  |
| NCDC24A | 18            | 457 | 14-1/2       | 368 | 13-1/2 | 343 | 13-1/2 | 343 | 4-5/8 | 117 | 3-5/8  | 92  |
| NCDC24B | 18            | 457 | 17-1/2       | 445 | 16-1/2 | 419 | 16-1/2 | 419 | 6-1/8 | 155 | 3-5/8  | 92  |
| NCDC36B | 23-1/2        | 597 | 17-1/2       | 445 | 16-1/2 | 419 | 16-1/2 | 419 | 6-1/8 | 155 | 4-3/4  | 121 |
| NCDC36C | 23-1/2        | 597 | 21           | 533 | 20     | 508 | 20     | 508 | 7-7/8 | 200 | 4-3/4  | 121 |
| NCDC42B | 23-1/2        | 597 | 17-1/2       | 445 | 16-1/2 | 419 | 16-1/2 | 419 | 6-1/8 | 155 | 6-3/8  | 162 |
| NCDC48C | 27-1/2        | 699 | 21           | 533 | 20     | 508 | 20     | 508 | 7-7/8 | 200 | 8-5/8  | 219 |
| NCDC60C | 27-1/2        | 699 | 21           | 533 | 20     | 508 | 20     | 508 | 7-7/8 | 200 | 10     | 254 |
| NCDC60D | 27-1/2        | 699 | 24-1/2       | 622 | 23-1/2 | 597 | 23-1/2 | 597 | 9-5/8 | 244 | 10-1/2 | 267 |

## UNIT DIMENSIONS - IN. (MM)



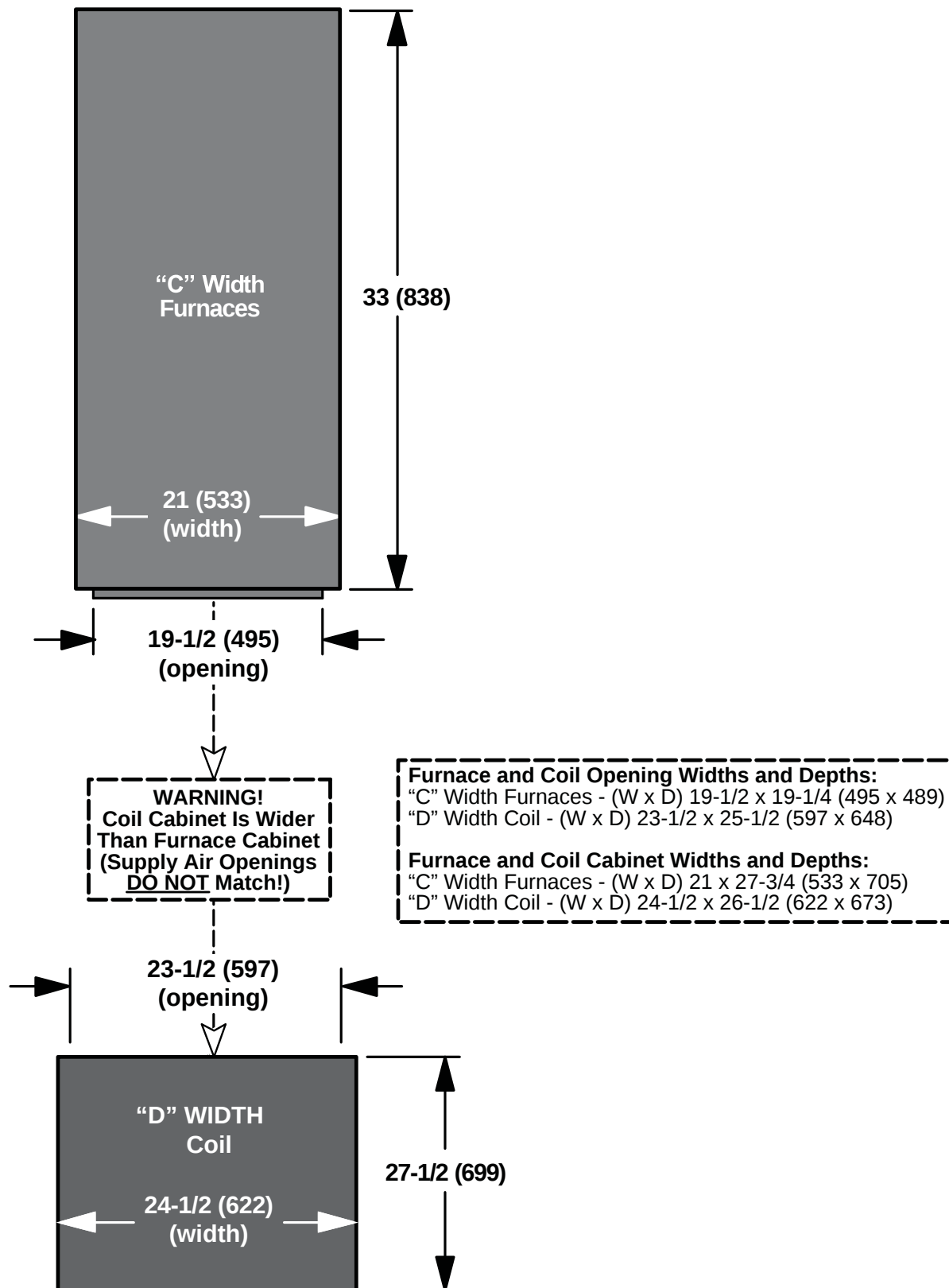
## FURNACE/COIL COMBINED DIMENSIONS

| Size    | Coil Width |     | Furnace Width |     | Coil Height |     | Overall Height |      |
|---------|------------|-----|---------------|-----|-------------|-----|----------------|------|
|         | in.        | mm  | in.           | mm  | in.         | mm  | in.            | mm   |
| NCDC24A | 14-1/2     | 368 | 14-1/2        | 368 | 18          | 457 | 51             | 1295 |
| NCDC24B | 17-1/2     | 445 | 17-1/2        | 445 | 18          | 457 | 51             | 1295 |
| NCDC36B | 17-1/2     | 445 | 17-1/2        | 445 | 23-1/2      | 597 | 56-1/2         | 1435 |
| NCDC36C | 21         | 533 | 21            | 533 | 23-1/2      | 597 | 56-1/2         | 1435 |
| NCDC42B | 17-1/2     | 445 | 17-1/2        | 445 | 23-1/2      | 597 | 56-1/2         | 1435 |
| NCDC48C | 21         | 533 | 21            | 533 | 27-1/2      | 699 | 60-1/2         | 1537 |
| NCDC60C | 21         | 533 | 21            | 533 | 27-1/2      | 699 | 60-1/2         | 1537 |
| NCDC60D | 24-1/2     | 622 | 24-1/2        | 622 | 27-1/2      | 699 | 60-1/2         | 1537 |

**PHYSICAL MATCHES**

Downflow Gas Furnaces – “C” width furnaces with “D” width coil

**(NOTE – Coil DOES NOT match furnace cabinet width and depth or supply air opening width and depth!)**





**GE APPLIANCES**

All specifications and illustrations subject  
to change without notice and without  
incurring obligations.

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