

**470318A**  
**Nokia Flexi EDGE Base Station, Rel. EP1,**  
**Product Documentation, v.1**

# **Installing Flexi EDGE BTS Modules in Citytalk Cabinet**

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# 1

## Overview of installing Flexi EDGE BTS modules in Citytalk cabinet

### Purpose

This is an overview of how to install Flexi EDGE BTS modules in a Citytalk cabinet.

For more information on Citytalk, see *Nokia Talk-family GSM BTS Product Documentation*.

### Before you start

- For installing Flexi EDGE BTS modules in a Citytalk cabinet, you need the Talk Conversion Kit (EMIA).
- Check that you have the required tools available. See Appendix A *Installation tools for Talk Conversion Kit*.



### Steps

1. **Check the delivery contents, see Appendix B Contents of the Talk Conversion Kit (EMIA) delivery.**
2. **Prepare the cabinet for the Talk conversion kit.**
3. **Install the Talk Conversion Kit and the modules in the cabinet.**



# 2

## Preparing Citytalk cabinet for Talk Conversion Kit

### Before you start

- Make sure that the power feed to the Citytalk cabinet is switched off from the mains breaker before starting the conversion work.
- Note that when installing Flexi EDGE BTS modules in Citytalk cabinet, new antenna jumper cables are needed. The antenna jumper cables must be IP54-rated and 1/2" cables can be used if they have a right angle connector.

For more detailed instructions on Citytalk cabinet, see *BTS Maintenance* and *Cabinet Installation* in *Nokia Talk-family GSM BTS Product Documentation*.

## Summary

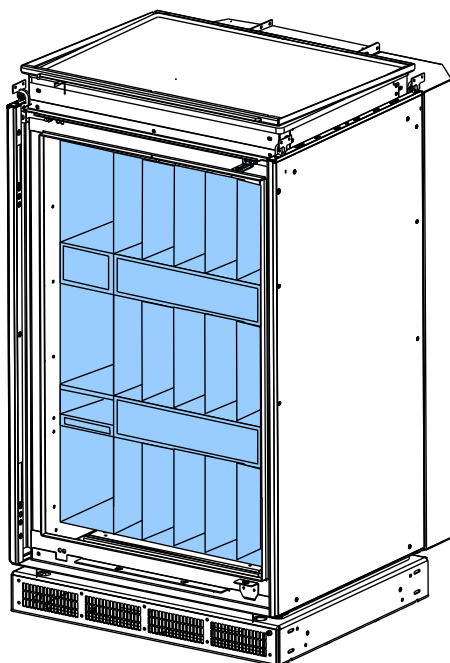


Figure 1. Preparing Citytalk cabinet for Talk Conversion Kit



## Steps

1. **Open the door.**
2. **Remove the roof.**
  - a. Open the roof.
  - b. From the back, pull out the spring locks on the roof mounting plate.
  - c. Lift the roof off the cabinet.
3. **Remove the heat exchanger (back wall).**



## Warning

**The heat exchanger is heavy. Take care when lifting it.**



- a. Open the heat exchanger locks.
  - b. Lift the heat exchanger off the cabinet.
  - c. Disconnect the power cable, fan connector and grounding cable.
4. **Remove the roof mounting plate from the heat exchanger.**
    - a. Remove the four screws connecting the roof mounting plate to the heat exchanger.
    - b. Store the roof mounting plate and four screws for later use.
  5. **Remove the four sets of taps, tap clips, pins, and retaining rings from the heat exchanger.**

Store the sets and the 16 M6 Allen screws for later use.

See figure *Parts needed for installing Flexi EDGE BTS Module in Citytalk cabinet* in *Installing Talk Conversion Kit and modules in Citytalk Cabinet*.

6. **Remove the door.**
  - a. Disconnect the door grounding cable from the door. The same grounding cable will be connected to the new door.
  - b. Lift the door out of the hinges.
7. **Remove the hinges from the door.**
  - a. Remove the four screws connecting each hinge.
  - b. Store the hinges and screws for later use.



Tip

Steps 8 and 9 can be done simultaneously by two people.

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8. **From the back of the cabinet, complete the following steps:**
  - a. Remove the air guide plate.
  - b. Cut all cables connected to the backplane.
  - c. Remove the busbar.
9. **From the front of the cabinet, complete the following steps:**

- a. Remove the air guide plates, plug-in units, and dummy panels from the main shelves.
- b. Remove the four screws holding each shelf in place (two on the left side, two in back, and two on the right side).
- c. Pull each shelf out.

**10. To remove the side shelf, complete the following steps:**

- a. From the top of the cabinet, use a drill to remove the rivet holding the side shelf in place.

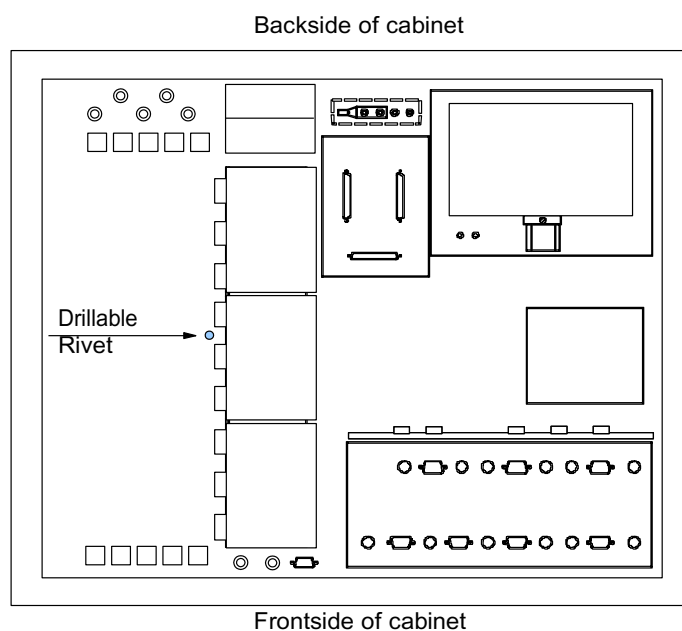


Figure 2. Removing the rivet

- b. From the front of the cabinet, remove the two nuts at the bottom of the cabinet.
  - c. From the front of the cabinet, rotate and pull out the side shelf.
- 11. Remove all remaining cables from the cabinet, including the antenna jumper cables.**
- 12. Remove all existing boxes from the bottom of the cabinet.**
- 13. Remove the existing smoke detector from the cabinet.**

The Talk cabinet smoke detector does not work with the Flexi System External Alarm Module (FSEB).

14. After removing all the required internal structure, drill symmetrical holes in the floor for water drainage as shown in the figure below.

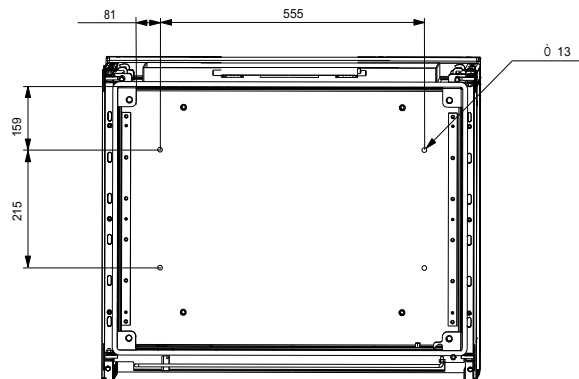


Figure 3. Holes for water drainage

15. Clean the floor of the cabinet.
16. Recycle all components not saved for later use.



# 3

## Installing Talk Conversion Kit and modules in Citytalk cabinet

### Before you start

When installing Flexi EDGE BTS modules in Citytalk cabinet, you need:

- Talk Conversion Kit (EMIA)
- The following components saved for reuse from the Citytalk cabinet, as instructed in section *Preparing Citytalk cabinet for Talk Conversion Kit*:
  - Roof
  - Roof mounting plate and four M6 Allen screws
  - Four sets of taps, tap clips, pins, and retaining rings and 16 M6 Allen screws from the heat exchanger
  - Two door hinges and eight flathead screws
  - Gasket from heat exchanger (back wall)
  - Door lock mechanism

Note that cable entries, front covers and back covers are not used when installing Flexi EDGE BTS modules in Citytalk cabinet.

## Summary

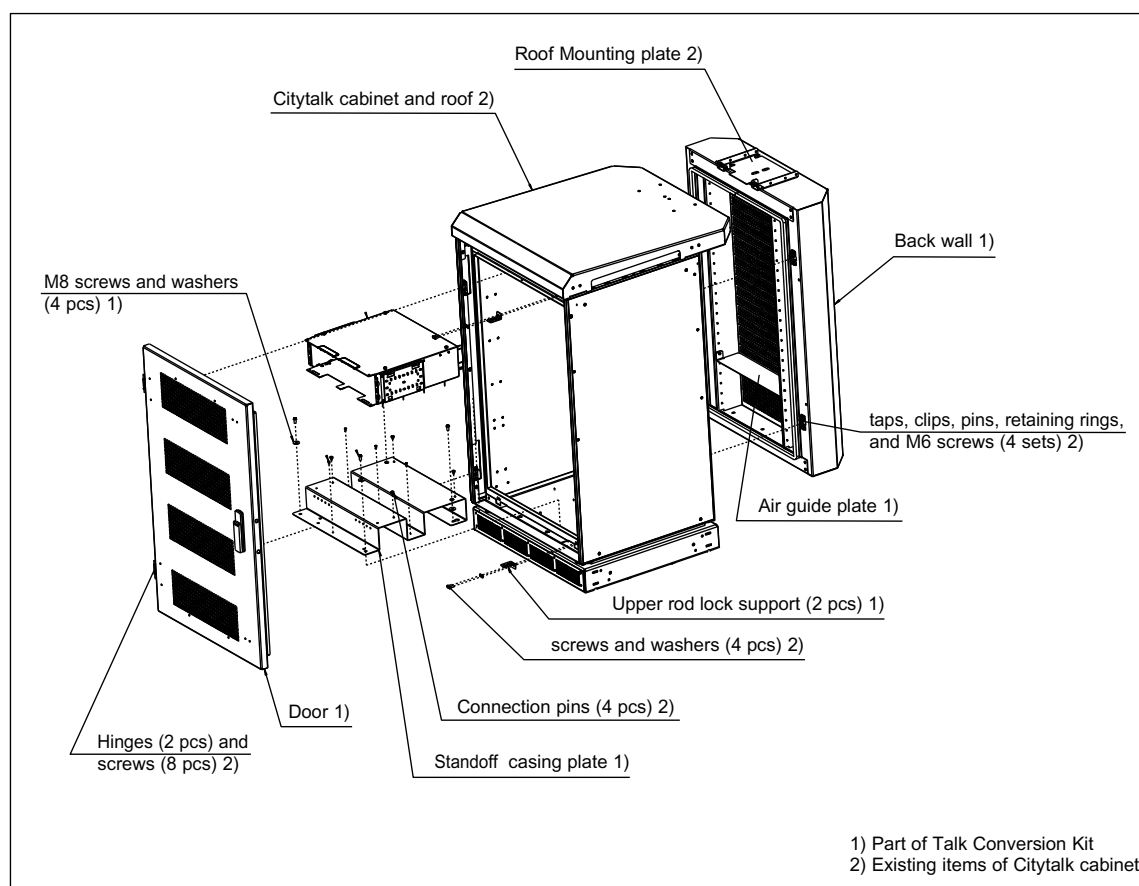


Figure 4. Parts needed for installing Flexi EDGE BTS modules in Citytalk cabinet



## Steps

### 1. Install the standoff casing plate on the cabinet floor.

Use the four M8 x 16 TORX screws in the Talk Conversion Kit (EMIA) delivery.

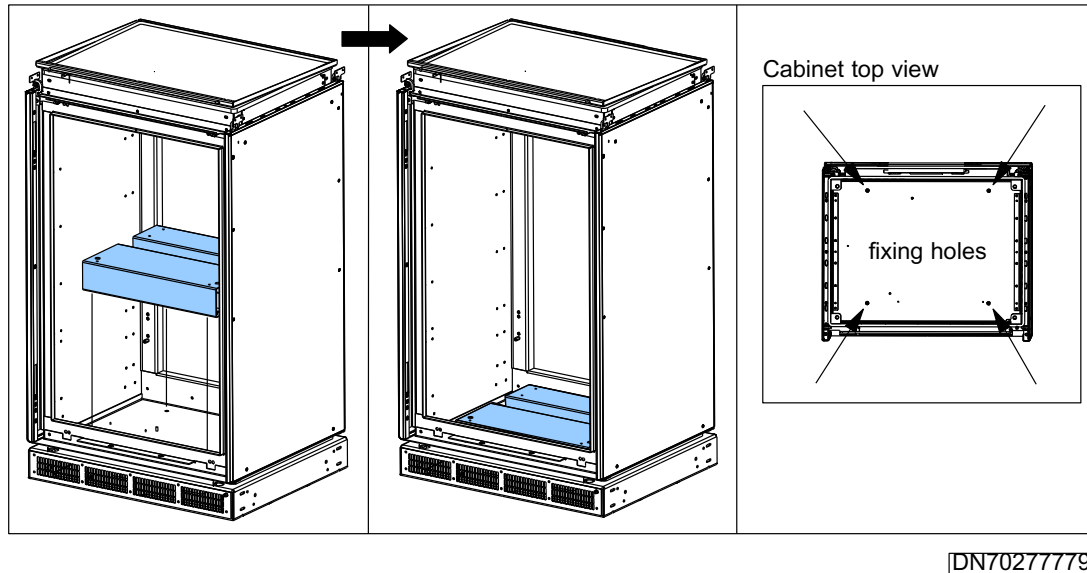
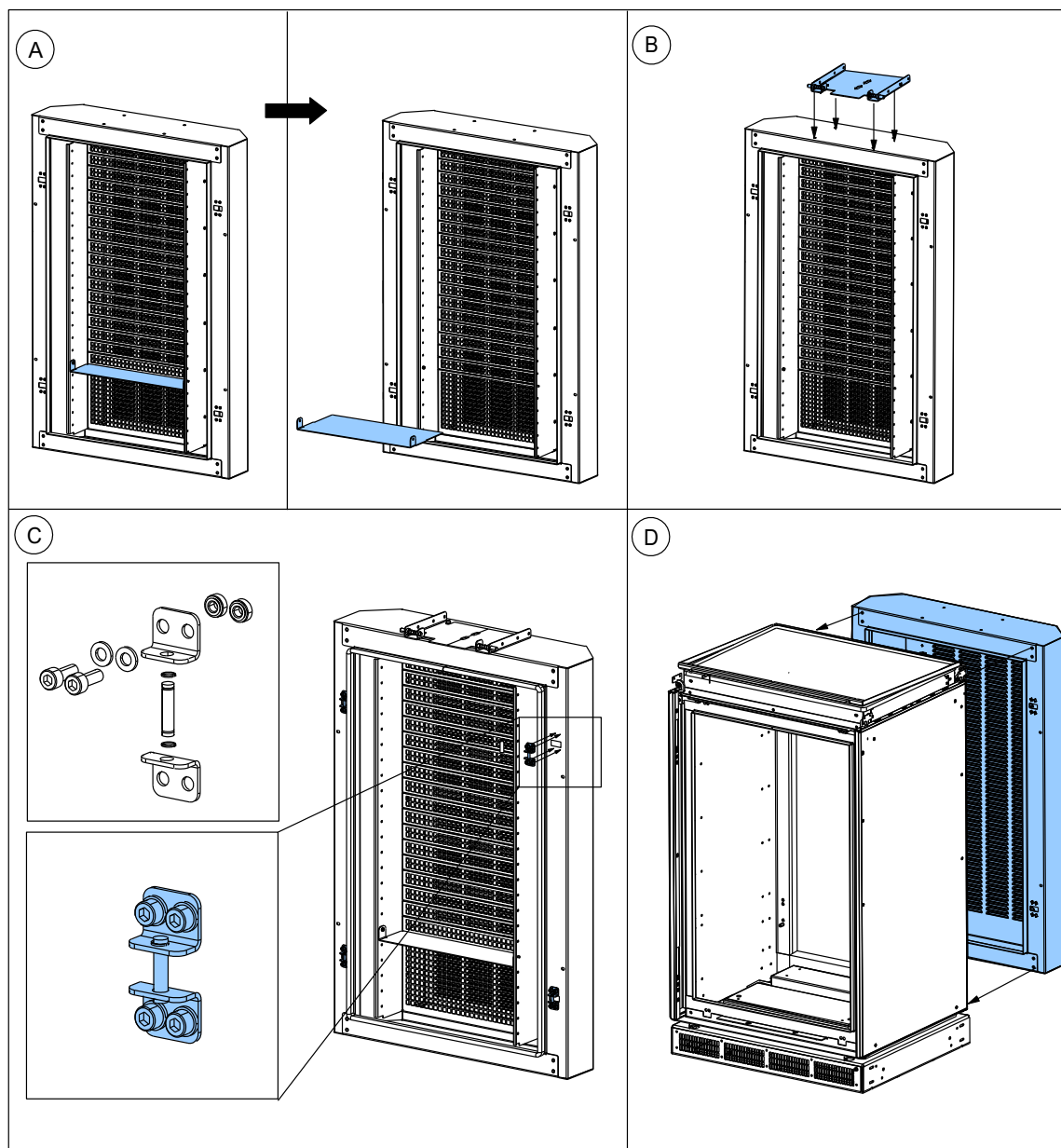


Figure 5. Installing the standoff casing plate (step 1)

**2. Install the four connection pins on the standoff casing.**

**3. Install the back wall of the Talk Conversion Kit (EMIA).**

- a. Remove the air guide plate from the back wall by loosening the two M5 x 10 screws connecting it to the back wall. The air guide plate will be reinstalled after the modules have been installed.
- b. Install the existing roof mounting plate on top of the new back wall with existing M6 Allen screws (4 pieces).
- c. Install the existing four sets of taps, tap clips, pins, and retaining rings to the new back wall with M6 Allen screws (4 pieces for each set).
- d. Mount the new back wall on the hinges and lock it with the triangle key.
- e. Install the gasket from the Citytalk heat exchanger (back wall) onto the EMIA back wall.



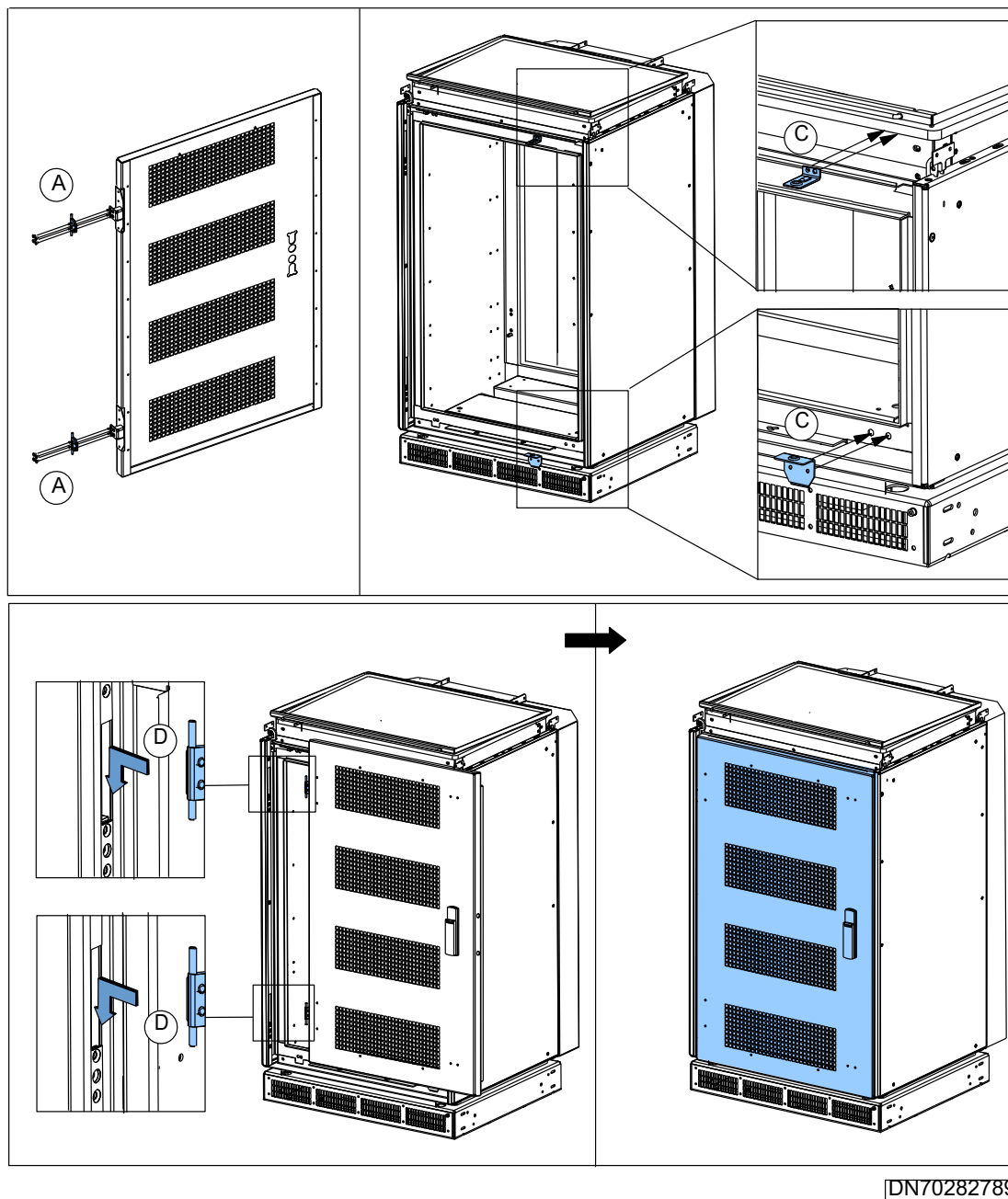
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Figure 6. Installing the back wall (step 3)

#### 4. Install the front door of the Talk Conversion Kit (EMIA).



- a. Remove the door lock mechanism from the existing Citytalk door, and install it into the EMIA door. The procedure is the same in both the Citytalk and EMIA doors. For instructions, see the *Nokia Talk-family GSM BTS Product Documentation* in NOLS.
- b. Install the existing door hinges (2 pieces) with existing flathead screws (4 pieces for each hinge).
- c. Remove the existing upper roller lock supports (2 pieces) from the door frame.
- d. Using the washers and screws from the previous step, install the new upper lock rod supports (2 pieces) in the same location where the existing supports were removed.
- e. Align the pins in the door with the holes in the hinges and mount the door. The edge of the door must be level with the edge of the cabinet.
- f. Connect the existing grounding cable to the door.



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Figure 7. Installing the front door (step 4)

- 5. Install the casings and modules for the appropriate configuration. Do not install the cable entries, front covers or back covers. If back covers are pre-installed on the casings, they must be removed before installation.**

The maximum height of Flexi EDGE BTS configuration in a Citytalk cabinet is 22 U.

If the FSEB is mounted on top of the stack, then the maximum recommended height of the stack is 18U.

The maximum Flexi EDGE BTS configuration in the Citytalk cabinet is 4+4+4 (with optional power modules).

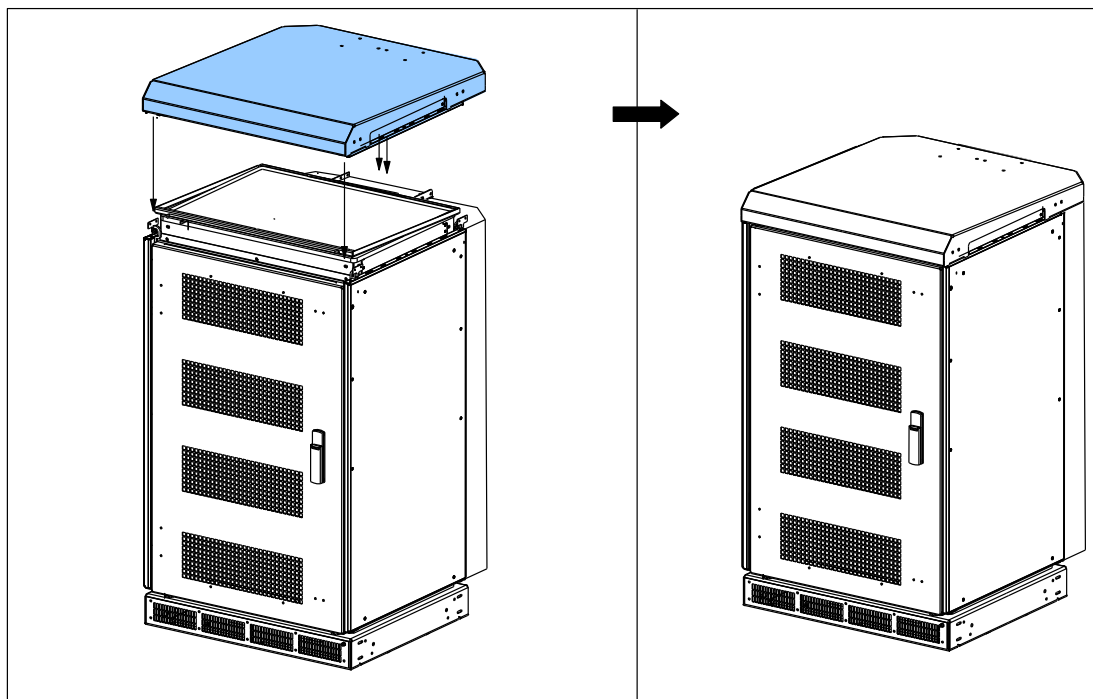
For instructions on installing and cabling the modules, see *Creating Stack, Wall and Pole Configurations*.

- 6. Install the air guide plate at the height of the top casing with 2 M5 X 10 TORX screws.**

See figure *Parts needed for installing Flexi EDGE BTS modules in Citytalk cabinet*.

- 7. Reinstall the roof.**

Use the hooks in front of the cabinet to secure the roof.



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Figure 8. Installing the roof (step 7)

## Appendix A Installation tools

### A.1 Installation tools for Talk Conversion Kit

The table below lists the tools needed for Installing the Talk Conversion Kit. For a complete tools list needed in installing Flexi EDGE BTS, see *Installation tools for Flexi EDGE BTS in Creating Stack, Wall and Pole Configurations*.

Table 1. Standard installation tools

<i>Installation tools</i>
Cable cutter
Crimping tool
Drill, 3/8" cordless
Drill bit set (metal drilling)
Gloves
Safety glasses, clear
Hexagon (Allen) keys: 4 mm, 5 mm, 6 mm (0.16 in., 0.20 in., 0.24 in.)
Tie wraps
Torque wrench for 7/16 antenna connectors
Triangle BTS door key
TORX screwdriver: T20
Phillips screwdriver
Wrench, adjustable

## Appendix B Delivery contents

### B.1 Contents of the Talk Conversion Kit (EMIA) delivery

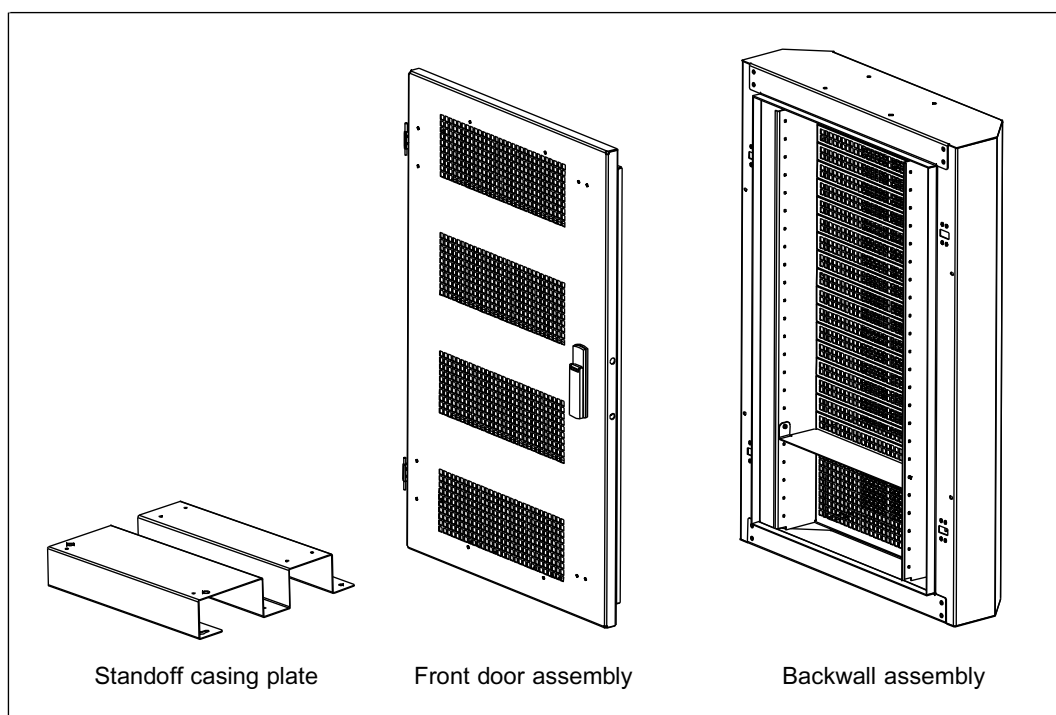


Figure 9. Nokia Flexi EDGE Talk Conversion Kit (EMIA) delivery contents

Table 2. Nokia Flexi EDGE Talk Conversion Kit (EMIA) delivery contents

Description	Product code	Quantity
Talk Conversion Kit (EMIA)	471429A	1
• Front door		1
• Back wall		1
• Standoff casing plate		1
• M8 x 16 screws		4
• Washer, flat M8		1
• Lock rod support, includes washer and screw		1

Table 2. Nokia Flexi EDGE Talk Conversion Kit (EMIA) delivery contents (cont.)

Description	Product code	Quantity
• Connection pins		4
• Upper lock rod supports		2