

**ARCHITECTS  
&  
ENGINEERS  
SPECIFICATIONS**

**ACS INTERCOM  
BUILDING ENTRY SYSTEM**

VERSION 6.0  
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HOUSING DEVICES, INC.  
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# ACS Building Intercom Systems

## ARCHITECTS AND ENGINEERS SPECIFICATIONS

### GENERAL

1. The Contractor shall furnish and install a vandal resistant stainless steel intercom system including, but not limited to, Lobby Panel, Apartment Stations, Universal Audio Amplifier, transformers, and all other equipment necessary to provide a complete and operating intercom system for the \_\_\_\_\_ Project.
2. Equipment furnished under the terms of this specification shall be the standard product of a single manufacturer. Equipment supplied by Housing Devices, Inc., 407 R. Mystic Avenue, Medford, MA 02155, (800-392-5200) shall be considered as meeting these specifications and as the base bid. Any alternate system must be approved by the specifying authority. Bidders supplying an alternate system must make the authority aware of their intentions and provide adequate information, including catalog cuts, working and shop drawings, and a demonstration of the proposed system at least 10 days prior to bid date. Any prior approval of an alternate system does not exempt the supplier from meeting the intent of these specifications. If the alternate system fails to provide all the requirements specified in this document, the Contractor shall be responsible for all costs associated with the removal and replacement of said equipment.
3. Panel shall be warranted against all major defects for its entire service life.
4. All hardware shall be "Acorn" style, tamperproof and constructed of stainless steel.

### LOBBY PANELS

1. The lobby panel shall be vandal resistant, manufactured of 16 gauge (0.062) #304 stainless steel with finished edges and corners, and comply with the Americans with Disabilities Act sections 4.3.11.4 and 4.3.11.5.
2. Lobby Panel shall be custom-sized to cover the old existing lobby panel area. No packing or plastering of building walls shall be needed after a new lobby panel is installed.
3. Lobby Panel shall contain one (1) .440" diameter flat metal button per apartment unit to initiate a request for access to each specific apartment in the building.
4. Lobby Panel shall be engraved (not silk screened or stamped). Apartment numbers shall be engraved on the lobby panel and be 5/32" in height or larger
5. Where specified, Braille characters shall be added beside each apartment unit's button. Braille characters will be directly stamped onto the panel. (Braille strips will not be accepted.)
6. Lobby panel speaker shall be of Mylar construction (paper cone speakers will not be accepted).

### APARTMENT STATIONS

1. Apartment Stations shall be manufactured of 20 gauge stainless steel with finished edges and corners.
2. Apartment Station buttons shall be of all metal construction, flat surfaced, and .440" in diameter. Buttons shall be activated with a minimum of effort and be "slam resistant".
3. No other hardware shall protrude from the apartment station higher than the push buttons. All stations shall fit without the need for adapter plates.

### AUDIO AMPLIFIER

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Audio amplifier shall be Housing Devices Inc. ACS-35 or equal. It shall contain an optional delay door opener adapter for postal door release, separate volume controls for both apartment stations and lobby panel. It shall contain the control, amplification, and power circuits to operate the system.

## TRANSFORMER

A 16 volt 30VA transformer shall be supplied and mounted in a standard outlet box.

## WIRING

1. System wiring shall be in accordance with proper engineering practices as established by the EIA and NEC. Wiring shall meet all established state and local electrical codes. All wiring shall test free from shorts and grounded as specified.
2. System wiring shall be accomplished using 22 AWG twisted pair for all connections.
3. System shall be wired in strict accordance with the manufacturer's recommendations and shall be free of grounds and shorts before the system is turned on.

## BASIC SYSTEM OPERATION

### *Front Entrance (Lobby Panel):*

A caller may press any push button on the front entrance intercom. This shall sound a signal at the apartment station being called. The tenant may converse by alternately pressing the Talk and Listen push buttons on the apartment station.

### *Apartment Unit (Apartment Station):*

If satisfied with the caller's identity, the tenant may press the button marked Door, which shall electrically operate the front entrance door opener permitting the caller to enter the building.

## SUBMITTALS

1. Data sheets on all equipment shall be provided.
2. Wiring diagrams showing typical field wiring connections shall be provided.

## QUALIFICATIONS

1. The Contractor shall be from an established business that has been operating in the area for a minimum of five years.
2. The Contractor shall show evidence that he maintains a service organization and parts inventory to adequately support the supplied equipment.

## MAINTENANCE SERVICE

1. The Contractor shall provide a one year guarantee of the installed system against defects in material and workmanship. All contractor labor and materials shall be provided at no expense to the Owner. Guarantee period shall begin on the date of acceptance by the Owner or Engineer.
2. The System Manufacturer shall warrantee the installed system's components against defects in material and manufacturer's workmanship for a period of one year from date of the system's shipment from the Manufacturer to the Contractor, Owner, Engineer or other specified receiving authority. Replacement or repair of system components only (job-site labor not included) shall be at the Manufacturer's discretion and provided at no expense to the Owner (shipping costs at other than standard ground rates will be the Owner's responsibility).

## QUALITY ASSURANCE

1. The Contractor shall currently maintain a locally run business for a minimum of five years and shall be an authorized distributor of the supplied equipment with full warranty privileges.
2. The Contractor shall maintain at his facility the necessary spare parts in the proper proportion as recommended by the equipment Manufacturer to maintain and service the equipment being supplied. This facility shall be available for inspection by the Engineer.

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3. The supplying Contractor shall have attended the Manufacturer's installation and service school or have been authorized by the Manufacturer to install the equipment.

## QUALITY ASSURANCE (Cont'd)

4. The Contractor shall furnish Manufacturer's manuals of the completed system including individual specification sheets, schematics, inter-panel and intra-panel wiring diagrams. In addition, all information necessary for the proper operation of the system must be included.
5. Any bidder using other than the specified equipment must provide this information prior to bidding.
6. As built drawings that include any changes to wiring, wiring designations, junction box labeling and any other pertinent information shall be supplied upon completion of project.

## IN SERVICE TRAINING

The Contractor shall furnish training with the system. Operating manuals and users guides shall be provided at the time of the training.

## PRODUCTS

The installation shall provide a vandal resistant multi-unit intercom communication system consisting of a Lobby Panel capable of handling the specified number of Apartment Stations. The system shall be equipped for \_\_\_\_ Apartment Stations.

## LOBBY PANEL

The Lobby Panel shall be constructed of 16 gauge (0.062) #304 stainless steel. The panel shall be large enough to accommodate the number of units specified. It shall provide ample space for a panel mounted tenant directory, electric postal release, and Braille characters, if specified. The lobby panel shall be capable of surface or flush mounting and utilize tamper proof mounting hardware. It shall include the following:

1. Panel capacity for the specified number of apartment units.
2. One 7/16" diameter flat metal momentary push button per apartment unit to initiate a request for access to each specific apartment in the building.
3. Depressing an apartment unit's button shall cause the appropriate unit's Apartment Station to sound and enable two-way voice communication between the Lobby Panel and Apartment Station to be initiated.
4. The system shall be able to provide an optional set of N/O dry contacts (if specified) for connection to remote audio-visual stations, or other optional devices such as CCTV cameras or a DTMF telephone dialer.

## APARTMENT STATIONS

The Apartment Station assembly shall be constructed of 20 gauge stainless steel. The station faceplate shall be capable of surface or flush mounting and utilize tamper proof mounting hardware.

The Apartment Station shall have the following features:

1. Three (3) .0440" diameter flat all metal momentary push buttons. It shall be activated with a minimum of effort and ease of use. No other hardware shall protrude from the station as high as the push buttons.
2. Pushbuttons shall be silkscreen labeled "TALK", "LISTEN", "DOOR"
3. A 2" paper cone 45 ohm speaker shall be provided.
4. An extra set of dry contacts shall be provided (if specified) for connection to optional equipment, such as, strobe light, remote audio visual annunciator, DTMF dialer, etc.

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## INSTALLATION

1. Complete system shall be installed in strict accordance with manufacturer's recommendations.
2. Lobby Panel and Apartment Station mounting shall be in accordance with the ADA recommendations and specifications.

## INSPECTION AND TEST UPON COMPLETION

1. System field wiring diagrams shall be provided to the Contractor by the system Manufacturer prior to installation.
2. Upon completion of the installation, four (4) copies of complete operational instructions shall be furnished, complete with record drawings. Instructions shall include part numbers and name, address, and telephone number of parts source.
3. Upon completion of the installation of the equipment, the Contractor shall provide to the Engineer a signed statement that the system has been wired, tested, and functions properly according to the specifications.
4. Nothing herein contained shall be construed to relieve the Contractor from furnishing a complete and acceptable electrical wiring system in all its categories.
5. The Engineer will reject any materials or labor, which are or may become detrimental to the accomplishment of the intentions of these specifications.