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## Flush Mounted TV and Speakers

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# Flush Mounted TV and Speakers

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# Flush Mounted TV and Speakers

IPD #202006256

## ABSTRACT

This invention provides custom installers and custom home builders with a simple and consistent solution to having a television panel installed so the front of the TV is flush (in line with) the surface of the wall. This installation also allows the associated speakers to be mounted within the wall as well. Power is provided to the TV and speakers. A swing out hinge on the TV allows it to be brought out so that the connectors behind it can be accessed and other mounting options are possible. In-wall cabinetry can be placed below the television to allow devices such as a cable TV box, video streaming device or DVD player to be kept under the TV to hide the cables which connect them to the TV. In-wall power is available for the accessory devices. The in-wall cable connection is allow placed within the lower cabinetry for access by the cable box to hide that cable as well. A plastic overlay, such as a vacuum formed panel or panels cover the brackets so that when the TV is pulled away from the wall the underlying steel structure is not seen. This overall can be made of any material and can be comprised of one or several parts. The same is done for where the speakers as placed. Fabric covered frames are placed over the speakers/sound system to hide them from view and give the entire wall a clean look.

## BACKGROUND

This invention provides a simple solution for custom installers and custom home builder. With televisions getting larger we've come to a point where the wall the TV is mounted on needs to be able to handle the greater strain in a consistent and standardized way. The inventions' design allows for the load bearing wood studs to be replaced with steel brackets. The flush mounting allows the entire entertainment system to have a clean, cable free appearance and is within the wall which makes the room appear bigger because it opens up more floor space. Also, since this will be a simple standardized solution to mounting very large TVs. Given the electrical and mechanical components of the solution meet building code it will make the custom installation easier. Others in the industry have used a metal structure replaces the wood

load bearing studs in the wall which creates a large inset for installing the TV. However, as televisions get larger, the ability to have an inset which will handle the load bearing of the building structure is needed.

### DESCRIPTION

This invention provides custom installers and custom home builders with a simple and consistent solution to having a television panel installed so the front of the TV is flush (in line with) the surface of the wall. This installation also allows the associated speakers to be mounted within the wall as well. Power is provided to the TV and speakers. A swing out hinge on the TV allows it to be brought out so that the connectors behind it can be accessed and other mounting options are possible. In-wall cabinetry can be placed below the television to allow devices such as a cable TV box, video streaming device or DVD player to be kept under the TV to hide the cables which connect them to the TV. In-wall power is available for the accessory devices. The in-wall cable connection is allow placed within the lower cabinetry for access by the cable box to hide that cable as well. A plastic overlay, such as a vacuum formed panel or panels cover the brackets so that when the TV is pulled away from the wall the underlying steel structure is not seen. This overall can be made of any material and can be comprised of one or several parts. The same is done for where the speakers as placed. Fabric covered frames are placed over the speakers/sound system to hide them from view and give the entire wall a clean look. In other embodiments, this invention could be used to mount other devices such as an array of computer servers where the home or building is meant to act as a small business enterprise.

Figure 1. Illustrates a wall insert system of the present invention for providing a flush mounted appearance for large televisions. Figure 2. Illustrates all insert system pf the present invention for providing a flush mounted appearance for large televisions, where the wall can be brought out to give the impression the TV is flush mounted into the wall. The wall can be brought out to match the extension to give the impression the TV is built flush into the wall, and the extension amount can be varied depending on the TV depth, TV size and support needs. Figure 3. Illustrates the TV mounted to the back of the cabinet. Pre-drilled for standardized TV mounting. Pre-wired for electrical outlets to allow equipment to

plug in. Two hinges at each position, (top and bottom) allow the TV to swing out to access the cable connectors in the back. The bracket may have motorized unit to allow button presses to control the TV position.

Flush Mounted TV and Speakers

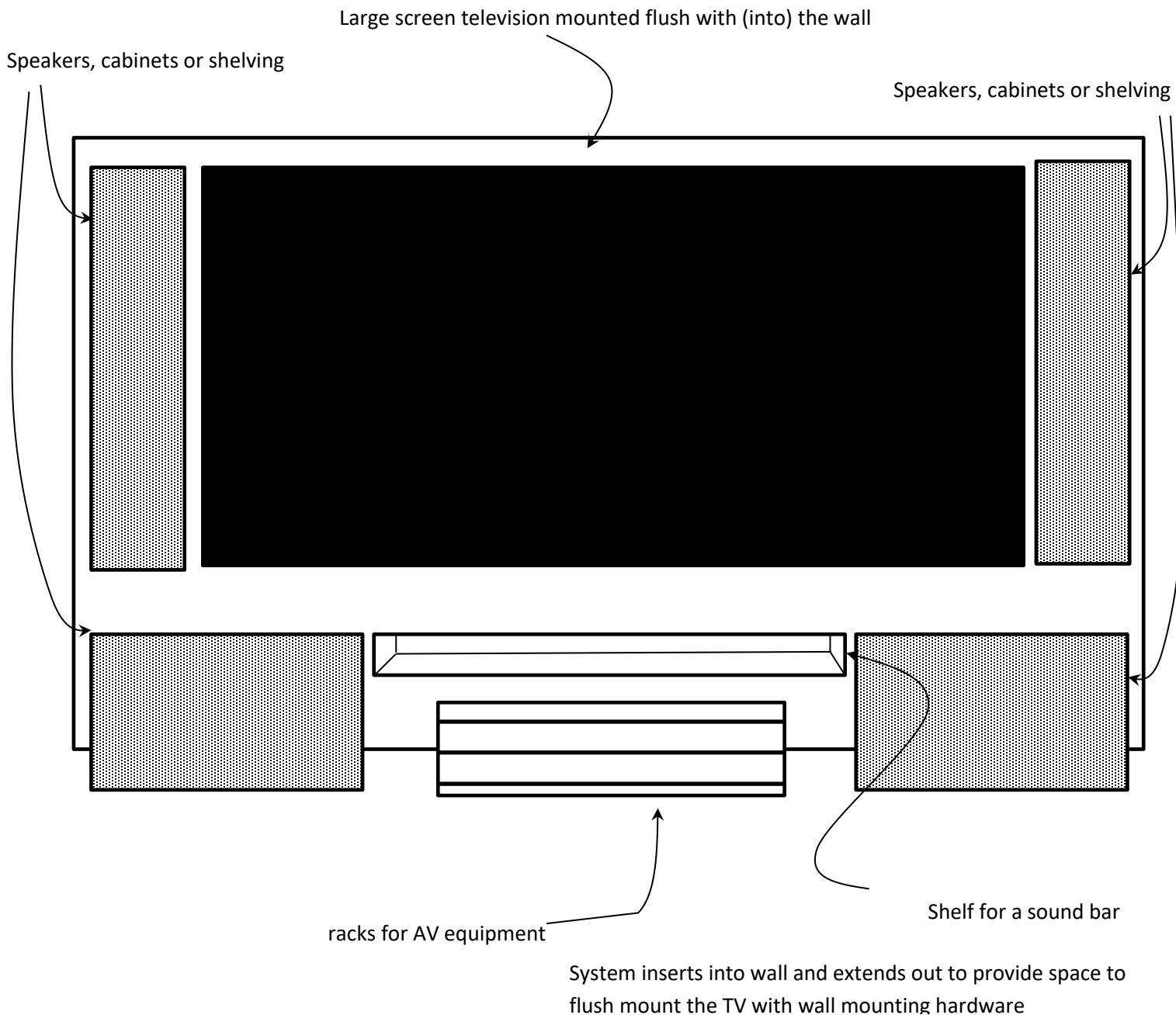
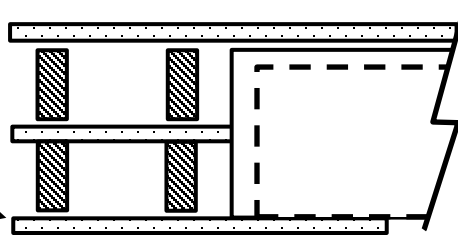
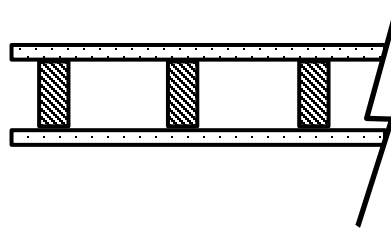


Figure 1. Wall insert system for providing a flush mounted appearance for large televisions

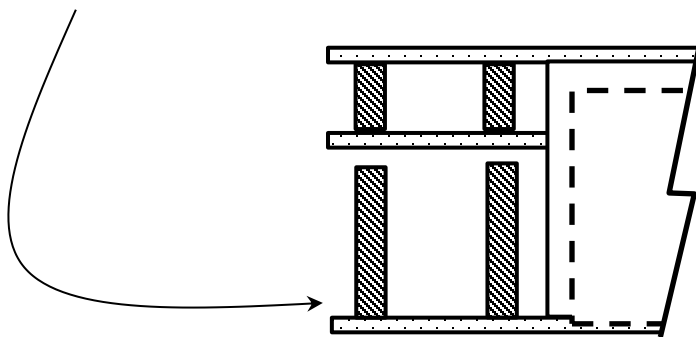
System inserts into wall and extends out to provide space to flush mount the TV with wall mounting hardware

Standard 4 inch studs with sheetrock on each side



The wall can be brought out to match the extension to give the impression the TV is built flush into the wall

The extension amount can be varied depending on the TV depth, TV size and support needs



System provides support/replacement for the structure supporting the ceiling

Figure 2. Wall insert system for providing a flush mounted appearance for large televisions. The wall can be brought out to give the impression the TV is flush mounted into the wall.

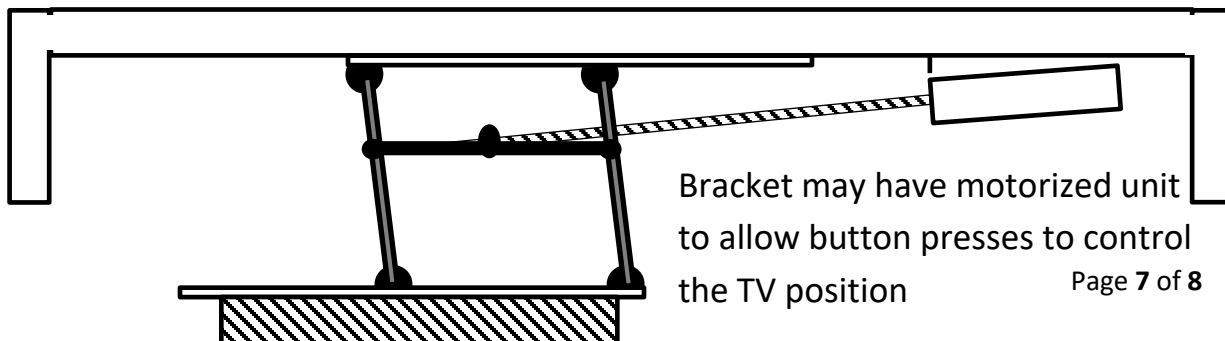
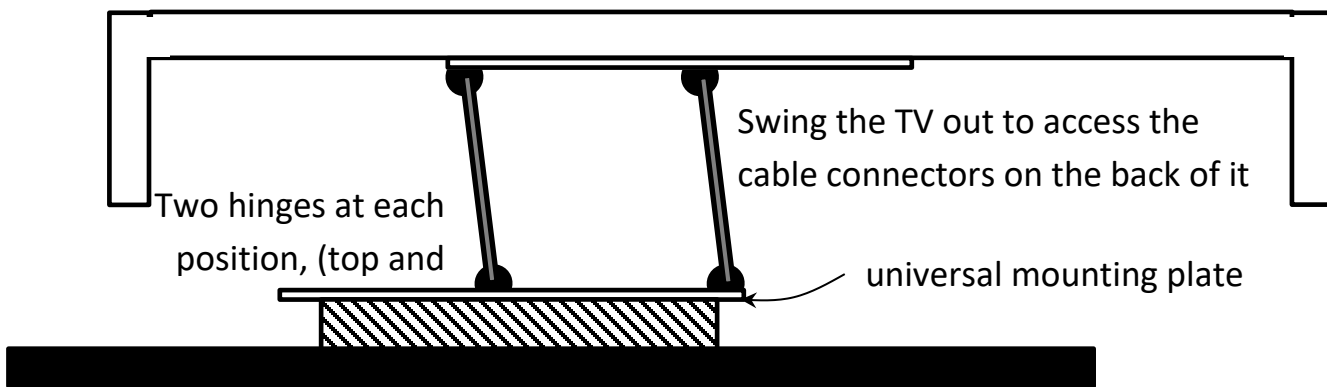
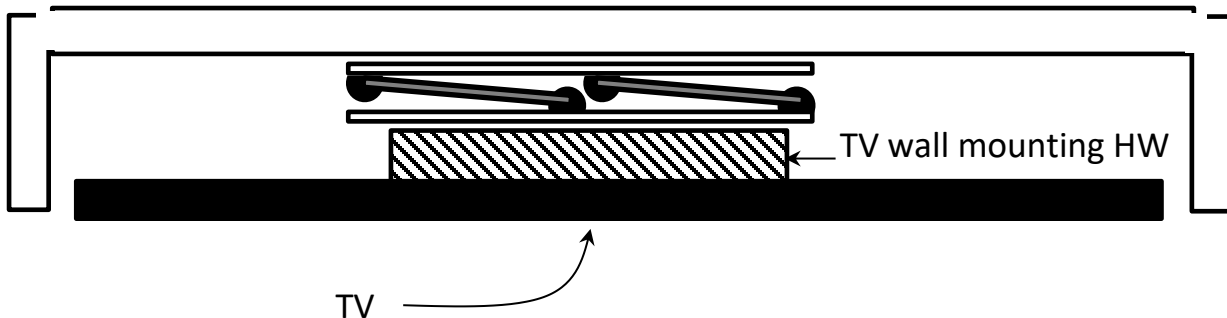




Figure 3. TV mounted to the back of the cabinet. Pre-drilled for standardized TV mounting. Pre-wired for electrical outlets to allow equipment to plug in.

Example

