CleanOpsStaff-3ed

(Last Updated 10/22/2011)

A Custodial Cleaning Operations and Staffing Computer Application

Based on APPA Operational Guidelines Educational Facilities: Custodial third edition

Developed by
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Hunter Consulting and Training
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Essential Questions About Your Custodial Operation You Must Be Able to Answer

- How many custodians and how much money do I need to clean the new building that is coming on line?
- How many cleanable square feet of space am I responsible for cleaning?
- How many custodians and how much money do I need to clean all the buildings I am responsible for?
- What cleaning level can I expect with my current staffing level and budget?
- What Cleaning level am I actually getting with my cleaning staff?
- Are my custodial equally work loaded?
- Are the days of the week equally worked loaded?
- When is it best to schedule my project work?
- What is my average CSF per Custodian?
- Can I reduce the cost of my cleaning operation?

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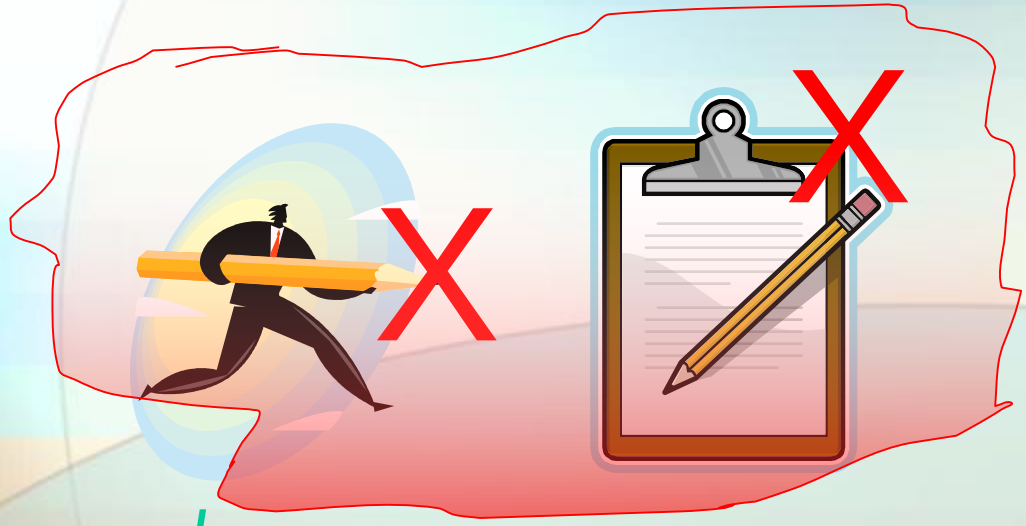
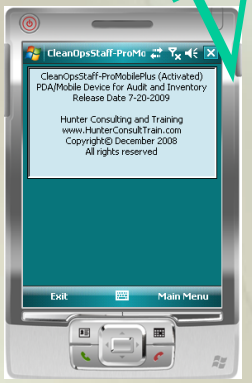
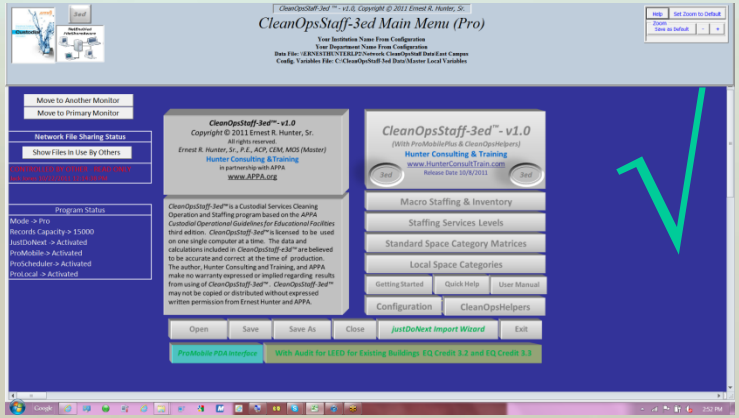
Why *CleanOpsStaff-3ed*?

It takes the pencil work out of implementing the guidelines…

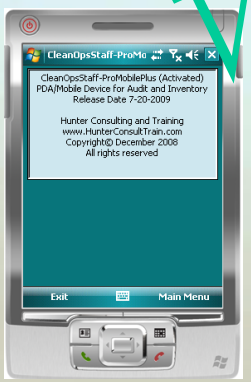


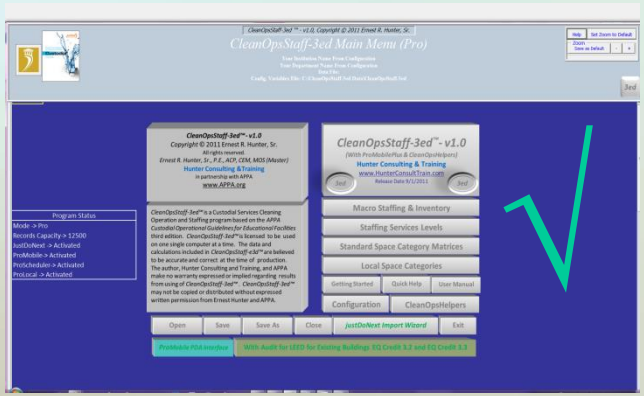




Why *CleanOpsStaff-3ed*?

CleanOpsStaff-3ed will do the grunt work and help you get the full value of the APPA concepts and guidelines in managing your custodial operation.





CleanOpsStaff-3ed Strategy

- Make Custodial Staffing and Operation software affordable for institutions who otherwise would not purchase expensive software.
- Make the package scalable so customer only pay for features they need
- Frequent free updates and enhancements based on user feedback (free to registered users)
- Easily accessible through web downloadable main program and add-in upgrades at reasonable price
- Partnership with APPA
- Training on-line and on-site and Implementation Support

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Purpose of *CleanOpsStaff-3ed*

- Computer application to help you use the *APPA Custodial Operational Guidelines (third edition)* to improve your custodial operations.
  - Help you determine the required staffing level for the desired level of cleanliness for new facilities coming on line and for existing facilities
  - Provides a computer assisted audit/assessment tool to determine what level of cleanliness you are actually achieving
  - Help you justify the budget resources (FTEs and cost) you need for new building coming on line and existing buildings
  - Help you balance FTE assignment to individual buildings or zones on your campus
  - Help you reduce the cost of your operation through reports that show resources by building and by room or space
  - Allow you to automatically create weekly and daily schedules using the ProScheduler upgrade

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CleanOpsStaff-3ed Concept

- Implements the APPA Custodial Ground Rules
  - Appearance Levels
  - Standard Spaces
  - Data in Cleanable Square Feet (CSF)
- Implements the APPA Appearance Levels
  - Level 1 – Orderly Spotlessness
  - Level 2 – Ordinary Tidiness
  - Level 3 – Causal Inattention
  - Level 4 – Moderate Dinginess
  - Level 5 – Unkempt Neglect

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CleanOpsStaff-3ed Concept (cont.)

- Implements other Guidelines methods
  - Routine Activities and Project Activities
  - Standard Spaces Category Matrices
  - Base Time To Clean
  - Minutes To Clean (MTC)
  - Daily Minutes To Set Aside
  - FTEs To Clean
  - Cleanable Square Feet (CSF) per FTE
  - Productive Minutes Per Day
  - Time Weighted Average Cleaning Level
  - Space Weighted Averaged Cleaning Level (*CleanOpsStaff-3ed* Added feature)

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CleanOpsStaff-3ed Capability

- *CleanOpsStaff-3ed-Demo - as downloaded from web site (free)*:
  - 100 records (Room/Space) capability
  - All capabilities of CleanOpsStaff-3ed-Full except Printing/Exporting
  - No Output capability
- *CleanOpsStaff-3ed-Full - Require Product Code from APPA:*
  - 5000 records (Room/Space) capability
  - Contain all capabilities except features listed below under CleanOpsStaff-3ed-Pro
  - *Data Export capabilities*
- *CleanOpsStaff-3ed-Pro - with Upgrades from Hunter Consulting & Training*:
  - Additional Record Capacity: Upgradable to 20,000 records capability – in 2500 records increments **
  - justDoNext Data Import Wizard: import space inventory data from external spreadsheet and automatically assign APPA space category **
  - *Mobile Device Audit/Inspection/Space Inventory: iPad, iPhone, iPod, Android devices, Smartphone/PDA/Pocket PC capabilities through CleanOpsStaff-3ed ProMobile* **
  - *ProLocal: Allow 40 local space matrices and direct access to ISSA cleaning times from Dropdown list***

**Require purchase of upgrade from Hunter Consulting and Training

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CleanOpsStaff-3ed Capability

- *NetEnabled with ShareAware*
  - ✓ ***CleanOpsStaff-3ed*** users can share Inventory and audit files on a network shared drive and with *ShareAware* can be aware of which files are in use by other users

- *MultiMonitorEnabled*
  - ✓ ***CleanOpsStaff-3ed*** users can operate with multiple monitors connected to their computer and easily switch ***CleanOpsStaff-3ed*** between monitor with the click of the mouse

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CleanOpsStaff-3ed Capability (cont.)

- *CleanOpsStaff-3ed* Features:
  - Can be configured for Local Variables (Hourly Wages, Productive Minutes in Day, Work Days In Year etc.)
  - Can save as different *Local Variables Files* to disk
  - Uses ***Quick Entry (QEntry) Toolbox*** to speed up data entry
  - Uses Quick Staff Calculator to quickly compute CSF/FTE, Cleaning Levels, FTE requirement, and Time To Clean
  - Uses ***Quick Ticket (QTicket)*** with ***Drag-To-Select*** to quickly determine staffing needs for subset of inventory
  - Uses ***Right Click Shortcut Menus*** with ***Flex-Copy-Paste*** to improve data input and integrity.

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CleanOpsStaff-3ed Capability (cont.)

- *CleanOpsStaff-3ed* Features:
  - Uses ***Drag-To-Select Report Generation*** to quickly generate reports for subset of inventory
  - Has 40 Local Space Categories that can be built to meet local conditions. Has Local Space Maker Toolbox (Like Wizard)
  - Can save many different Local Space Categories files to disk
  - Can Customize a ***Sixth Cleaning Level (Level C2)*** for all 33 APPA standard Space
  - Can save many different Custom Standard Space Categories files
  - Can accommodate additional frequencies such as Twice Daily (TD), Three Times Per Month (3/M), Twice Weekly (TW)

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CleanOpsStaff-3ed Capability (cont.)

- *CleanOpsStaff-3ed* Features:
  - **LEED-EB EQ Credit 3.2 and 3.3 Audit Support**
  - **Upgrade to 20,000 record capacity** (1)
  - **Import inventory data from normal Excel spreadsheet** (2)
  - **Conduct Audit inspection with PDA/Smartphone/Pocket PC** (3)
  - **Collect inventory data with PDA/Smartphone/Pocket PC** (3)
  - **Conduct Audit inspection with iPad, iPhone, iPod, Android Devices** (3)
  - **Collect inventory data with iPad, iPhone, iPod, Android Devices** (3)
  - Export all data and report to any other application including Excel, Word, PowerPoint, etc.
  - Performs all the calculations in the APPA Guidelines
  - Generates all the Reports in the APPA Guidelines
  - Automatically generate weekly and daily schedules (4)

(1) Require purchase of additional record capacity in ***2500 record increment***
(2) Require purchase of ***CleanOpsStaff-3ed JustDoNext Data Import Wizard*** Add-in
(3) Require purchase of ***CleanOpsStaff-3edMobile***
*(4) Require purchase of **CleanOpsStaff-ProMobile upgrade***

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CleanOpsStaff-3ed Capability (cont.)

- *CleanOpsStaff-3ed* Features:
  - ***Drag To Select*** to analyze data subset or run reports
  - ***Main Panel*** with ***low light/high light mode*** for maximum data view
  - ***Time Mode Button*** to switch between displaying times in ***Minutes and Hours***
  - ***Work Mode Button*** to switch among ***Routine Activities***, ***Projects Activities*** and ***Both (Routine & Projects) Activities***
  - Has extensive ***Instant Help in Screen Tips, Help Button and Quick Help File Desk Guide***
  - ***Contextual Help*** (click on item and a help message box appears)

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CleanOpsStaff-3ed Capability (cont.)

- *CleanOpsStaff-3ed* Features:
  - ***High Density Toolboxes*** with ***Active Edges and Dual Shapes***
    - ***Active Edges*** - click on Active Edges to read system information in Main Panel or change shape of Toolbox
    - ***Dual Shapes*** – most toolboxes can be switched between Long-Width/Short-Height and Narrow-Width/Tall-Height for maximum visibility of your data
    - Toolbox dragging and pinning allows all tools to be dragged and pined to the desired position on the screen for maximum visibility of the worksheets and the toolboxes
    - Has built-in ***MiniKeypad*** and ***MiniCalculator*** to perform math operations and paste results into worksheets and forms – useful when converting space dimensions to square feet

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CleanOpsStaff-3ed Technical Overview

- Written in Visual Basic for Applications (VBA)
- Uses Microsoft Excel 2003, 2007, 2010 & 2013 as platform
- Runs with latest version of Windows and Excel (See Compatibility Info at http://www.hunterconsulttrain.com/cleanopsstaff-3ed-home
- No other software required except Windows and Microsoft Excel
- Uses *High Density Floating Toolboxes* with *Active Edges* – packs lot of commands in small screen space – reduces the number of mouse clicks need to execute commands.

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CleanOpsStaff-3ed Technical Overview (cont.)

- ***CleanOpsStaff-3ed*** is a specialized user interface for Excel
- ***CleanOpsStaff-3ed*** takes advantage of the power and ease of Excel
- Learning curve for people who always use Excel would be very short
- No experience needed with Excel or any other program to learn to use ***CleanOpsStaff-3ed***

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CleanOpsStaff-3ed Modes

CleanOpsStaff-3ed has three modes. The DEMO mode, Full Feature Mode, and Pro Mode.

The Demo Mode is intended for demonstration and evaluation and can only handle 100 records or spaces and has certain feature restrictions. You may use the Demo mode only for these two purposes.

The ***Full Feature Mode*** can handle 5000 records or spaces with no feature restriction. You must obtain a ***Product Code from APPA*** and an ***Activation Key*** from ***Hunter Consulting and Training*** and activate the program before you can run *CleanOpsStaff-3ed* in Full Feature Mode.

The ***Pro Feature Mode*** allow you to add up to 20,000 records or and install upgrades. Any upgrade or record capacity increase converts *CleanOpsStaff-3ed to Pro mode*.

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Very Best Regards,

Hunter Consulting and Training

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User/Training Manual

This manual contains information and exercises designed to help you learn the features of *CleanOpsStaff-3ed*. You can also request *CleanOpsStaff-3ed* training for your custodial leadership staff from *Hunter Consulting and Training*. Send email to erhunter@HunterConsulTrain.com to get a quote to train your staff at your site or via Live On-Line Session.

You can also order training and assistance directly from the web site http://hunterconsulttrain.com/BuyCleanOpsStaffAssist.aspx

NOTE-2: Some of the screenshots in this document might be too small for you to read the text in them. In these instance, the screenshot is intended to give you a visual idea of what to expect in the application and you should read the text on the actual screen in the application instead of in the screenshot.

Exploring the *CleanOpsStaff-3ed* Environment (*Main Menu*)

File Information Area: Contains info on active Data file and the Active Configuration Files.

Main Panel: contains MiniToolboxes and allows room for floating toolboxes.

Copyright Info and link to APPA web site. Reset.

Zoom and Help Tool. Get Help on Main Menu. Zoom the size of the Main Menu and save zoom setting

Monitor Switching Buttons

Network File Sharing button and ShareAware information

Title Button and Hunter Consulting &Training Web link.

Disclaimer and Splash Screen Button. Toolbox Pin Reset. Use to pin toolboxes too default location.

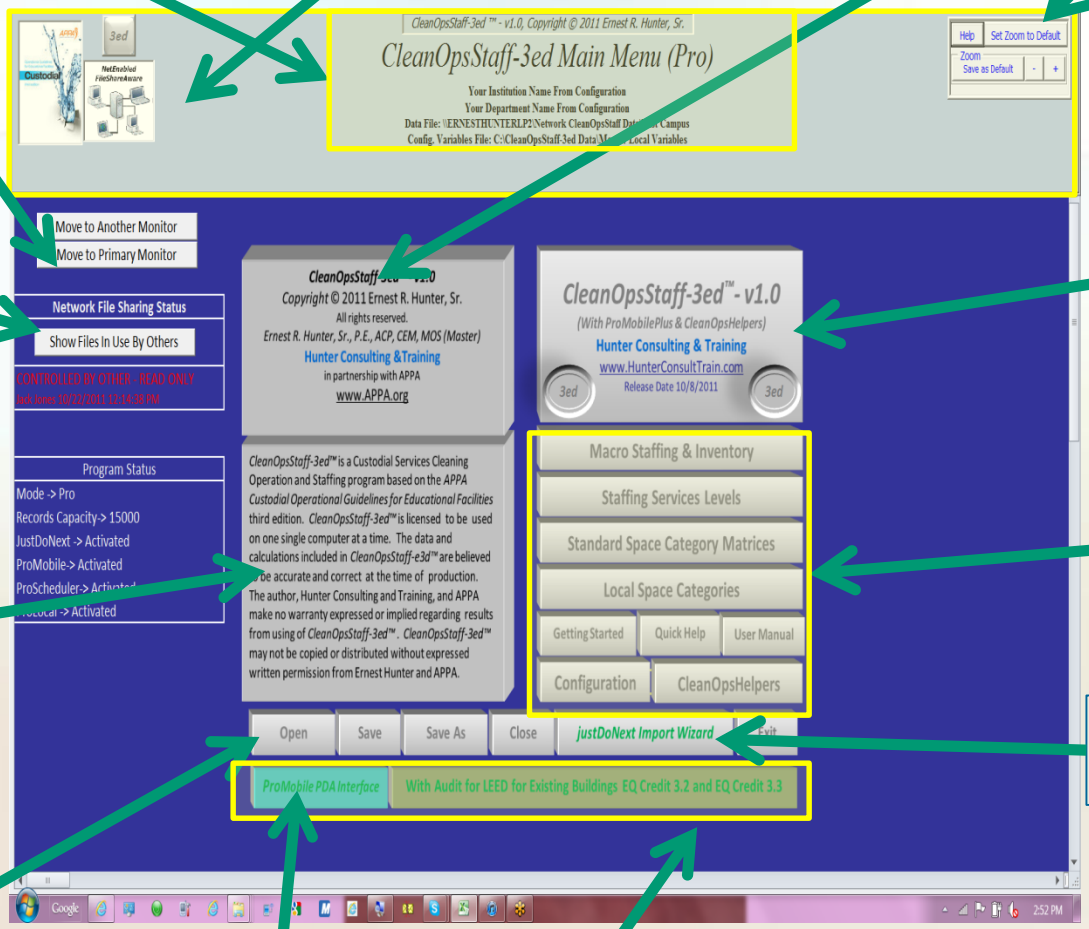
Main Menu Command Buttons: Used to Navigate to worksheets

Main Menu File Buttons: Used to open, save and close Data and Inventory Files and to Quit *CleanOpsStaff-3ed*.

Data Import Button

PDA/Mobile Device Feature

LEED Existing Building Features

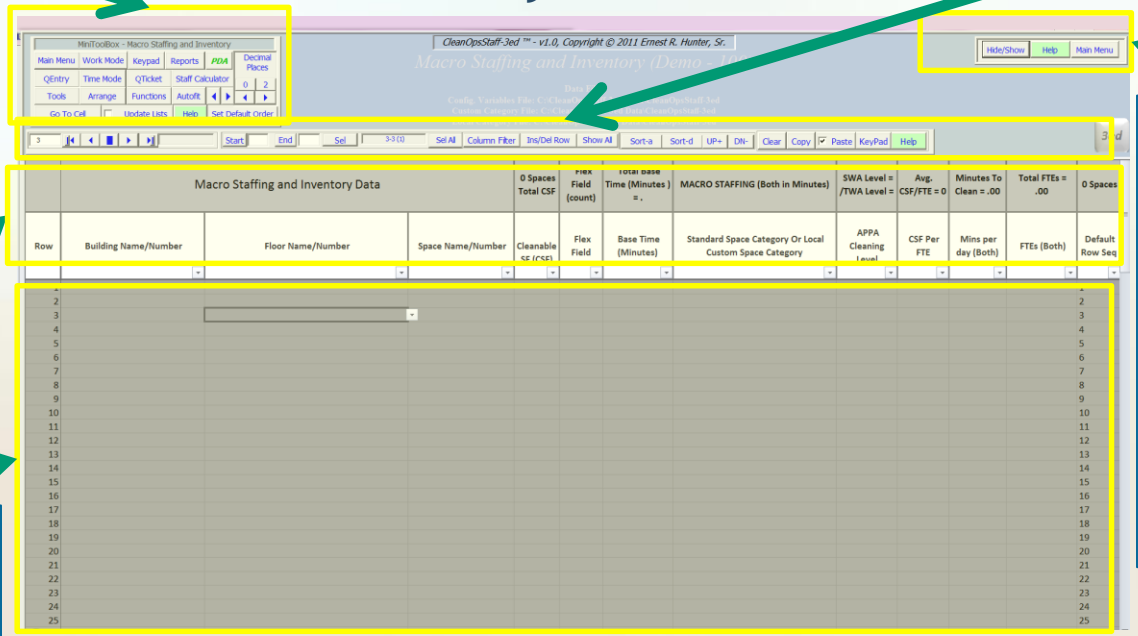


Exploring the CleanOpsStaff-3ed Environment (*Macro Staffing and Inventory Worksheet*)

Stationary MiniToolbox: contains command buttons specific to active worksheet. Can be hidden but cannot be moved.

Records Navigator and Selection: Used for moving from record to record and for selecting, sorting and filtering records.

Macro Staffing and Inventory Worksheet



Click for Help Zone: When pointer turns to hand click for help.

Data and Inventory Area. Contain the inventory data and the calculations performed by CleanOpsStaff-3ed.

Show/Hide Button: Used to show and hide the MiniToolbox and Records navigator to make room for other floating toolboxes in the Main Panel.

Exploring the CleanOpsStaff-3ed Environment (*Standard Service Levels Worksheet*)

Stationary MiniToolbox: contains command buttons specific to active worksheet.

Base assignable Cleanable Square Feet per FTE (CSF/FTE).

List of Standard Space Categories: You can select the Space Category then use the MiniToolbox to go to the Space Category Matrix.

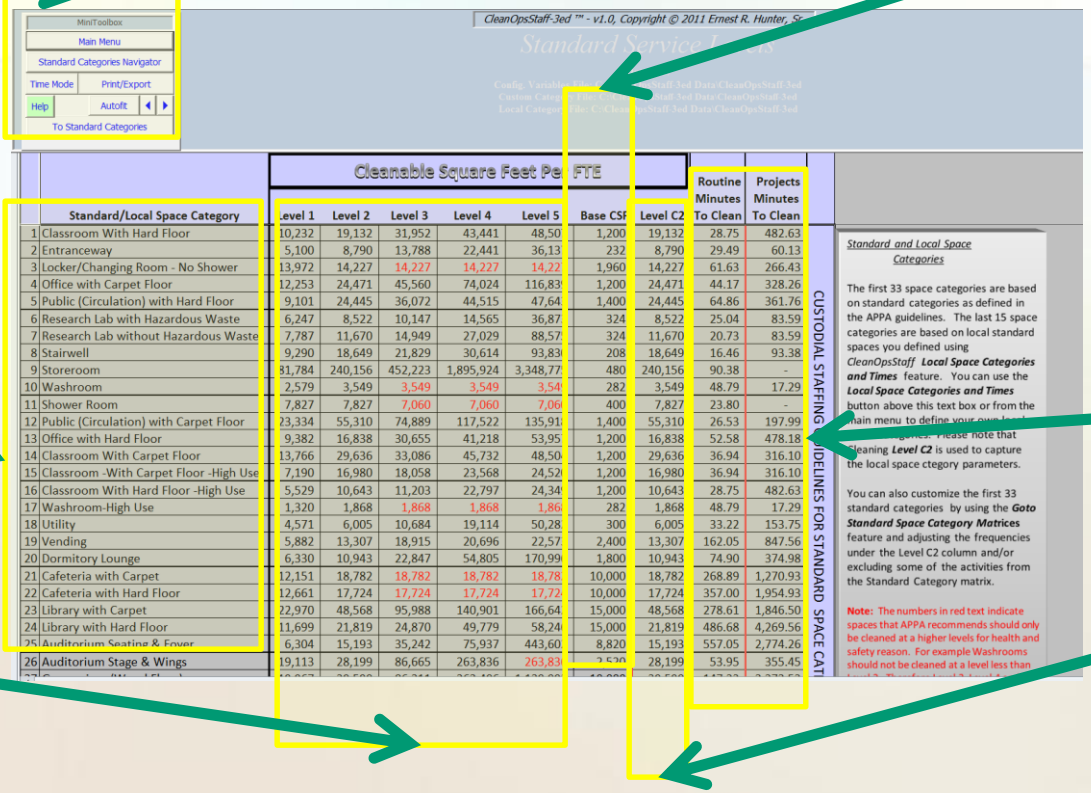
Base Time to Clean Space for Routine Activities and Projects Activities. Newly Added by CleanOpsStaff-3ed.

Cleanable Square Feet Per FTE data for each Space Category for all five standard cleaning levels.

Cleaning Level C2: Used to customize a standard space to match local conditions. Newly Added by CleanOpsStaff-3ed.

Note:40 Local Space Categories are at the bottom of this worksheet following the 33 standard APPA Space Categories.

Standard Service Levels Worksheet



Exploring the CleanOpsStaff-3ed Environment (*Typical Standard Space Category Matrix*)

Stationary MiniToolbox: contains command buttons specific to active worksheet.

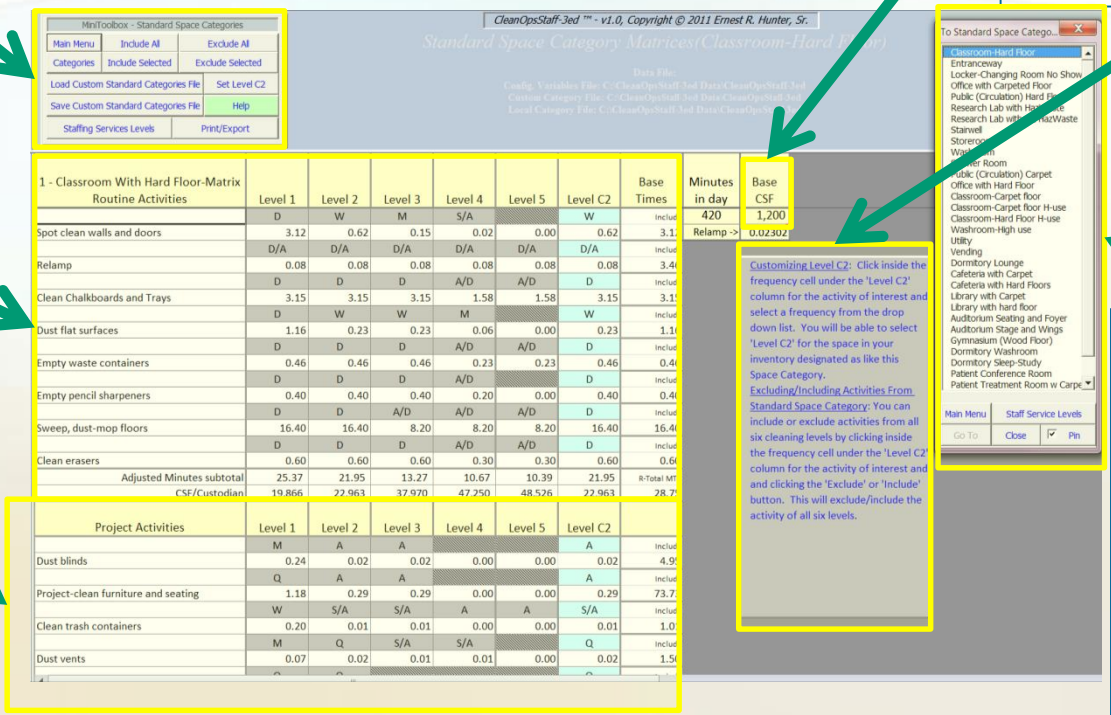
Base Cleanable Square Feet

Brief Instruction Box

Routine Activities Area.

Projects Activities Area.

Standard Space Category Navigator: Used to move to and from the 33 Standard Space Categories Matrices.



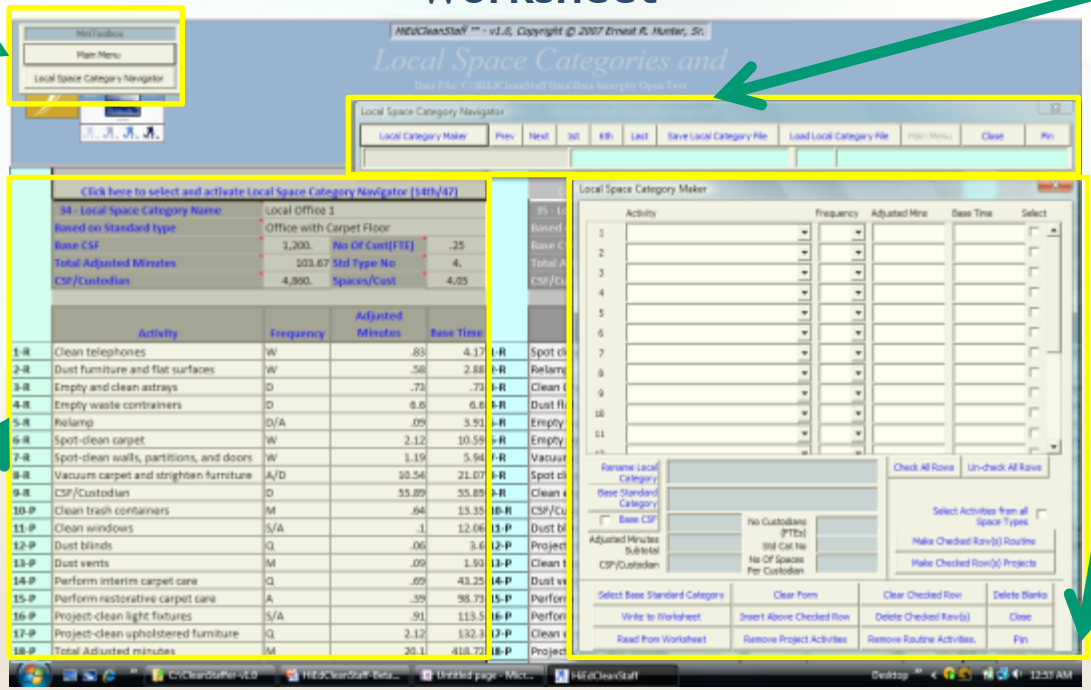
There are 33 Standard Space Category Matrices as defined in the APPA Custodial Operational Guideline.

Exploring the CleanOpsStaff-3ed Environment (*Local Space Categories Worksheet*)

Stationary MiniToolbox: contains command buttons specific to active worksheet.

Local Space Category Navigator: Used to select one of the 40 Local Space Categories .

Local Space Categories Worksheet



Local Space Category Maker (like a Wizard): Used to build a Local Space Category. The Space Category Maker allows you to copy a standard category and modify it to meet your local needs

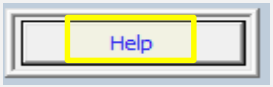
Active or Selected Local Space Category: Text turns blue for the selected Local Space Category and the screen scroll so that the selected Category is in the far left columns.

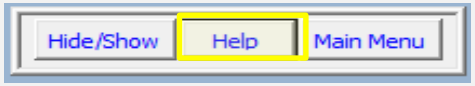
There are 40 Local Space Categories on this worksheet that you can build to meet your local needs. 15 are available without the ProLocal Upgrade

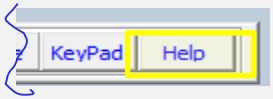
Getting Help

Method 1

1. Use the **Help Buttons** in the upper right corner of the **Main Menu, the Hide/Show Toolbox, Toolboxes** and throughout the application. (Note: most toolboxes have a Help Button for contextual help.) Click the **Help** button to activate the Help center. You can send the help text to other applications and print it for easy reference.







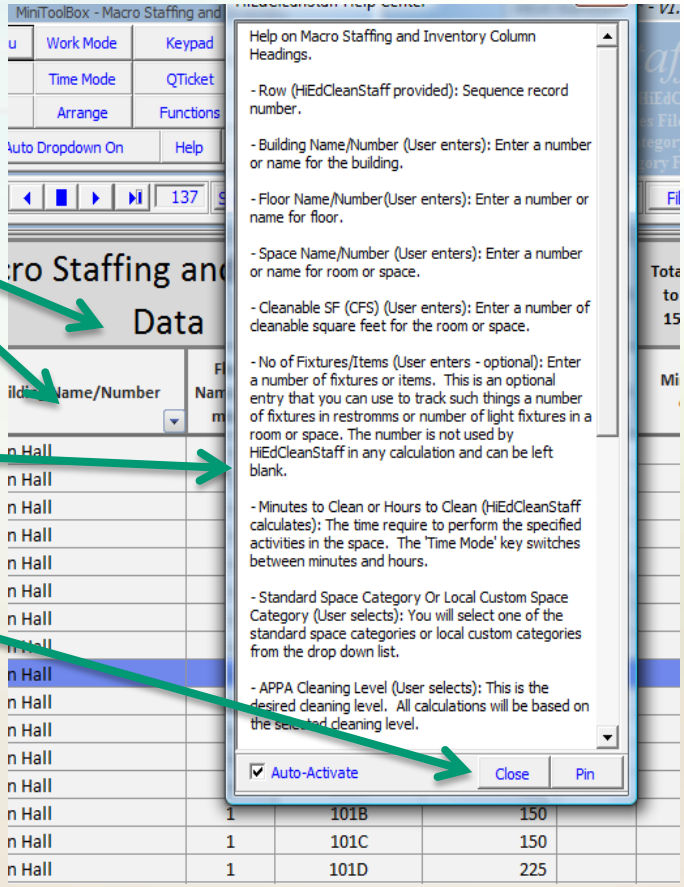
Method 2

1. Click on any Toolbox on the outer edges or in the title area to give the Toolbox the Focus.
2. Move the mouse pointer over a Toolbox element (Command Button, Input Box, etc.)
3. Pause the pointer over the element and read the **Screen Tip** in the yellow box.

Getting Help (cont.)

Method 3

1. Start in Macro Staffing & Inventory Worksheet
2. Move the mouse pointer to the top of the first or second row of headings
3. When the mouse pointer turns into a hand, click the mouse
4. The Help Center Box will appear with contextual help
5. Click again or click the Close Button on the Help Center Box to close the Help Center Box
6. Whenever you move the mouse over an item in a worksheet and it turns into a hand with a pointing finger you can left click and get Help.



Procedure 1 - Entering data directly in the worksheet

Procedure 1 - Entering data directly in the worksheet
1. Start in **Main Menu** 2. Click **Macro Staffing & Inventory Button** 3. Click on next empty **Row Cell** in **Row** Column 4. Press **TAB Key** on keyboard to move insertion point to second column (**Building Name/Number**) 5. Type a Building Name or Number and press **TAB** 6. Type a Floor Name or Number and press **TAB** 7. Type a Space Name or Number and press **TAB** 8. Type a number for the Cleanable Square Feet (CSF) and press **TAB** 9. Use the **Drop Down Arrow** to select a Standard or Local Space Category and press **TAB** 10. Use the **Drop Down Arrow** to select a Cleaning Level and press **TAB** 11. Type number or text for *Number of Fixtures/Items and press* **TAB** (This is optional and can be skipped by just pressing **TAB** again) 12. Repeat steps 4 through 10 to enter more records Note: The calculated cells are write protected and you do not need to be concerned about accidentally disturbing them.

Exercise P1-1 -- Enter data for six(6) spaces.

Exercise P1-1 -- Enter data for six(6) spaces. (Answer in file '***Exercise P1-1 Results-HECS-Data.xls'***)

1. Enter the below data in the Macro Staffing & Inventory Worksheet following the steps in the **Procedure 1** on the previous page.

Row	Building Name/Number	Floor Name/Number	Space Name/Number	Cleanable SF (CSF)	No of Fixtures/Items	Minutes to Clean	Standard Space Category Or Local Custom Space Category	APPA Cleaning Level
1	Main Building	1	100	150			Office with Carpet Floor	Level 2
2	Main Building	1	101	235			Office with Hard Floor	Level 2
3	Main Building	1	102	325			Domitory Lounge	Level 1
4	Main Building	1	103	1,500			Classroom With Carpet Floor	Level 3
5	Main Building	1	104	486			Research Lab without Hazardous Wa	Level 2
6	Main Building	2	200	1,285			Cafeteria with Hard Floor	Level 1

Summary Results

Total Base Time (Minutes) = 1,126.59	MACRO STAFFING (Both in Minutes)	SWA Level = 1.97/TWA Level = 1.59	Avg. CSF/FTE = 15,317	Minutes To Clean = 109.16	Total FTEs = .26	6 Spaces
Base Time (Minutes)	**Standard Space Category Or Local Custom Space Category**	**APPA Cleaning Level**	**CSF Per FTE**	**Mins per day (Both)**	**FTEs (Both)**	**Default Row Seq**
46.55	Office with Carpet Floor	Level 2	**24,471**	**2.57**	**0.006**	1
103.94	Office with Hard Floor	Level 2	**16,838**	**5.86**	**0.014**	2
81.23	Dormitory Lounge	Level 1	**6,330**	**21.56**	**0.051**	3
441.30	Classroom With Carpet Floor	Level 3	**33,086**	**19.04**	**0.045**	4
156.48	Research Lab without Hazardous Wast	Level 2	**11,670**	**17.49**	**0.042**	5
297.08	Cafeteria with Hard Floor	Level 1	**12,661**	**42.63**	**0.101**	6
						7

Exercise P1-1 (cont.) – Explanation of Summary Results

Exercise P1-1 (cont.) – Explanation of Summary Results

Summary Calculations

Detail Individual Space Calculations

6 Spaces 3,981 Total CSF	Flex Field (count)	Total Base Time (Minutes) = 1,126.59	MACRO STAFFING (Both in Minutes)	SWA Level = 1.97/TWA Level = 1.59	Avg. CSF/FTE = 15,317	Minutes To Clean = 109.16	Total FTEs = .26	6 Spaces
Cleanable SF (CSF)	Flex Field	Base Time (Minutes)	Standard Space Category Or Local Custom Space Category	APPA Cleaning Level	CSF Per FTE	Mins per day (Both)	FTEs (Both)	Default Row Seq
150		46.55	Office with Carpet Floor	Level 2	**24,471**	**2.57**	**0.006**	1
235		103.94	Office with Hard Floor	Level 2	**16,838**	**5.86**	**0.014**	2
325		81.23	Dormitory Lounge	Level 1	**6,330**	**21.56**	**0.051**	3
1,500		441.30	Classroom With Carpet Floor	Level 3	**33,086**	**19.04**	**0.045**	4
486		156.48	Research Lab without Hazardous Wast	Level 2	**11,670**	**17.49**	**0.042**	5
1,285		297.08	Cafeteria with Hard Floor	Level 1	**12,661**	**42.63**	**0.101**	6
								7

Explanation of summary calculations from left to right:

1. 6 spaces for 3,981 Total Cleanable Square Feet (CSF)
2. It takes 1,126 minutes to perform all the Routine and Projects activities for the 6 spaces.
3. The **Work Mode** is **Both** (**Routine** and **Projects** activities). The **Time Mode** is Minutes.
4. The **Space Weight Average (SWA)** cleaning level is 1.97 and the **Time Weighted Average (TWA)** cleaning level is 1.59. **TWA** is the APPA approach. SWA is added by *CleanOpsStaff-3ed* to weight the cleaning level by the relative size of the spaces. **SWA** is just another data point.
5. The average cleanable square feet per FTE is 15,317 CSF/FTE
6. You must set aside 109.16 minutes each day to for **Routine** and **Projects** activities.
7. *You* would need .26 FTE. To clean at the selected levels in the worksheet.
8. CleanOpsStaff-3ed counted 6 total spaces.

Exercise P1-2 – Changing Work Mode and Time Mode

Exercise P1-2 – Changing **Work Mode** and **Time Mode**

Explanation of Work Mode and Time Mode. ***CleanOpsStaff-3ed*** default is to calculate time in Minutes and for both **Routine** and **Projects** activities. However, many institution break the custodial work up into **Routine** activities which are activities that are perform at least weekly and Projects activities which are performed at a lesser frequency. Additionally, sometimes it is more convenient to see time in hours.

1. **Time Mode Button** –
    a. With the data from Exercise P1-1, review the **Macro Staffing and Inventory** worksheet and note that time is in minutes.
    b. Close **QEntry** if necessary.
    c. If necessary, click **Hide/Show Button** on the **Hide/Show Toolbox** in the upper right of the screen to show the **MiniToolbox** if necessary.
    d. Click **Time Mode b**utton**.** Observe that time is now in hours and the heading for the two columns involving time changes to white or un-shaded and the **Mode Heading** changes from **MACRO STAFFING (Both in Minutes)** to **MACRO STAFFING (Both in Hours)**.
    e. Click **Time Mode Button** again and note that things change back to the default colors and values. Repeat this until you are comfortable with the **Time Mode b**utton. Click to return to **MACRO STAFFING (Both in Minutes)** mode.

Exercise P1-2 (cont.) – Changing Work Mode and Time Mode

Exercise P1-2 (cont.) – Changing **Work Mode** and **Time Mode**

2. **Work Mode Button** –
   a. With the data from Exercise P1-1 review the **Macro Staffing and Inventory** worksheet and note the calculation for both **Routine** and **Projects** activities.
   b. Close **QEntry** if necessary.
   c. If necessary, click **Hide/Show Button** on the **Hide/Show Toolbox** in the upper right of the screen to show the **MiniToolbox** if necessary.
   d. Click **Work Mode** button. **Mode Heading** changes from **MACRO STAFFING (Both in Minutes)** to **MACRO STAFFING (Routine in Minutes)**.
   e. Note the color change for the first and sixth headings.
   f. Note the summary and detail calculations change to reflect results for **Routine** activities only
   g. Click **Work Mode** button **again**. **Mode Heading** changes from **MACRO STAFFING (Routine in Minutes)** to **MACRO STAFFING (Projects in Minutes)**. Observe calculation and color changes again then click **Work Mode** button to return to (Both in Minutes).
   h. Click **Work Mode** and **Time Mode Buttons** to cycle through the six modes reflected in the chart to the right. Click to get back to **MACRO STAFFING (Both in Minutes)** mode.

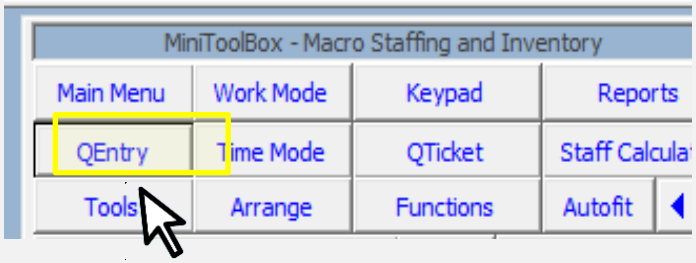
Both	Routine	Projects
Minutes	Minutes	Minutes
Hours	Hours	Hours

Procedure 2 -- Using QEntry for data input

Procedure 2 -- Using QEntry for **data input**.

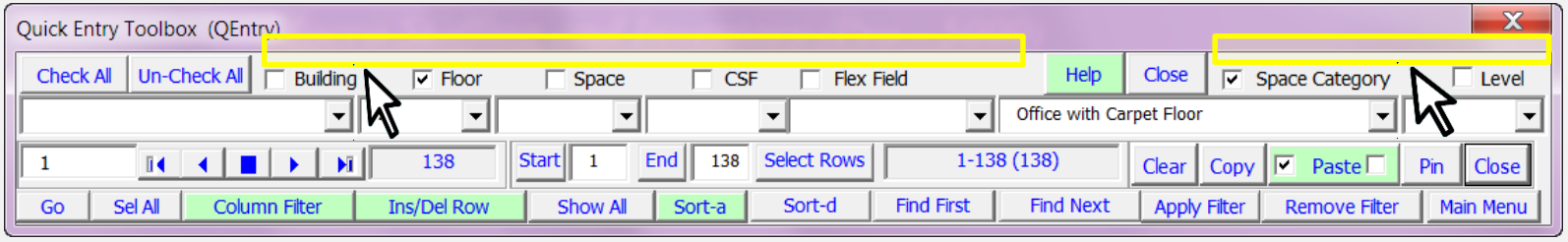
1. While in the **Macro Staffing** and **Inventory Worksheet**, click **QEntry** on the **MiniToolbox** in the upper left corner of the screen.

Note: This will activate the **QEntry** Toolbox

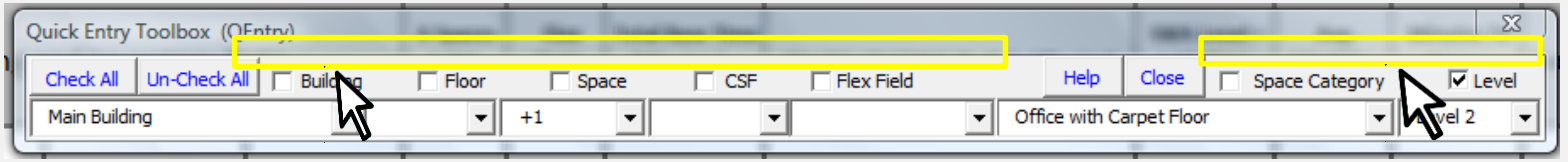


2. Click any blank gray area on **QEntry** to toggle between **Tall Mode** and **Short Mode**. This feature works for most tool in ClenaOpsStaff-3ed to help you get maximum visibility of your data worksheets and the tools as desired at the moment.

Tall Mode



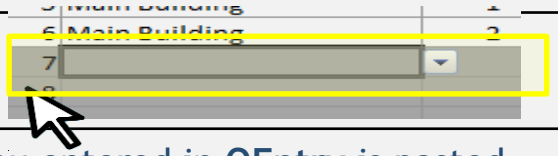
Short Mode



Procedure 2 -- Using QEntry for data input (cont.)

Procedure 2 -- Using QEntry for data input (cont.).

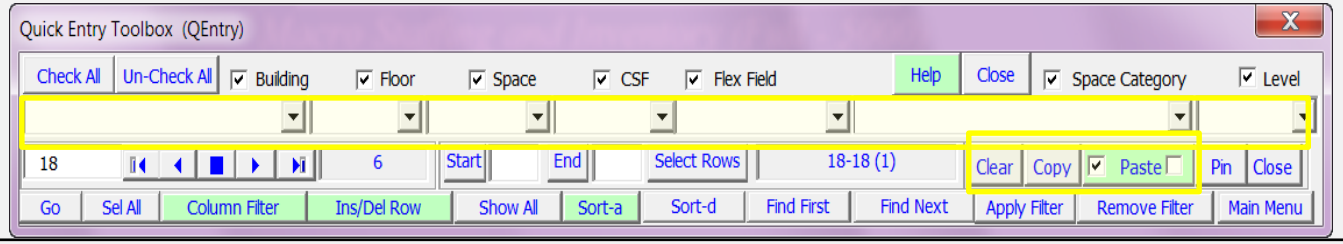
4. Click the **QEntry** top blue **Title Bar** to ensure it has the focus.
5. Roll the mouse pointer over the **Un-Check All Button** and pause to read the **Screen Tip** **(Note: If you are using multiple monitors, the Screen Tip might be displayed on the primary monitor)**
6. Roll the mouse pointer over the **Checkboxes** and pause for **Building**, **Floor**, **CSF**, **Space Category**, and **Level**. Read the **Screen Tip** as you pause.
7. Click to **Check** the **Checkboxes** for the data elements you want to enter data for (e.g.: any combination of **Building**, **Floor**, **CSF, Space, Category ,** and **Level** .
8. Type data in the **Input Boxes** or select from **Dropdown List.** (Note: you may pause the mouse pointer over the input boxes and read the screen tip to confirm which data element they are for.
9. Inside of the of the **Data and Inventory Area,** click on the **Row Cell** of the first empty row.



10. Click the **Paste Button** and click **Yes.** (Note: the data you entered in **QEntry** is pasted into the selected row.)
11. To paste the data to multiple rows, click inside of the **Row Cell** in the first row and **drag to highlight (select) multiple rows**. Click to **Uncheck** the **Checkboxes** of the data you do not want to paste such as the **Space Name/Number** and **CSF** since these elements are usually unique for each record.
10. Click the **Paste Button** and click **Yes.** (Note: the data you entered in **QEntry** is pasted into the range of rows you selected.)

Procedure 3a. Exploring QEntry data Input functions

Procedure 3a. Exploring **QEntry** data **Input functions.**



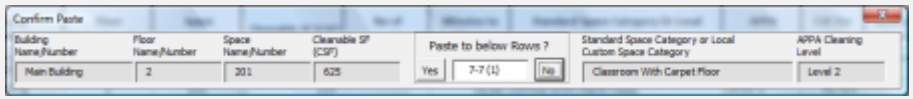
1. **Check All** – places a check mark in all the data element checkboxes. A check mark in a data element box means the corresponding Input Box will be acted upon when you use the **Find**, **Apply Filter**, **Remove Filter**, **Clear**, **Copy** or **Paste** buttons.
2. **Un-Check All** – remove check mark in all the data element checkboxes.
3. **Clicking Individual Checkboxes** – toggle between checked and un-checked for the individual checkbox.
4. **Clear - clear the input boxes when the corresponding check box is checked.**
5. **Copy** – copy the data from the current active **Data and Inventory Row** into QEntry input boxes when the corresponding checkbox is checked..
6. **Paste** – paste data from input boxes into the selected row(s) of the **Data and Inventory Area** for all input boxes that have their corresponding QEntry checkbox checked.
7. **Paste Checkbox** ( ) – un-check this box to prevent being prompted to confirm pasting data from QEntry to the **Data and Inventory Area. It is recommended that you only un-check this box when you are absolutely sure you want to paste. CleanOpsStaff-3ed does not have an undo feature.**

Exercise P3-1. Using QEntry to input one (1) record.

Exercise P3-1. Using **QEntry** to input one (1) record.

Building	Floor	Space	CSF	Space Category	Level
Main building	2	201	625	Classroom With Carpet Floor	Level 2

1. Starting in **Macro Staffing and Inventory Worksheet**, click **QEntry** in the **MiniToolbox.**
2. Drag QEntry to very top of screen and roll the mouse over QEntry gray edge to put in **Tall Mode.** Note: when **QEntry** is not in the Main Panel you can toggle between **Tall Mode** and **Short Mode** by clicking in a gray edge of QEntry.
3. Click **Check All** button**.**
4. Type information from above table for **Building**, **Floor**, **Space** and **CSF** into **QEntry**. Select **Space Category** and **Level** from the dropdown list.
5. Click anywhere in row 7. Observe **Current Record Box** on the **Records Navigation Tool.**
6. Click **Paste Button** and observe the **Paste Confirmation Toolbox** and below. See next Exercise for more on the this toolbox.



7. Click **Yes**. Observe data now appears in row 7.

Note: if you do not wish to be prompted before each paste operation you may uncheck the **Paste Checkbox**

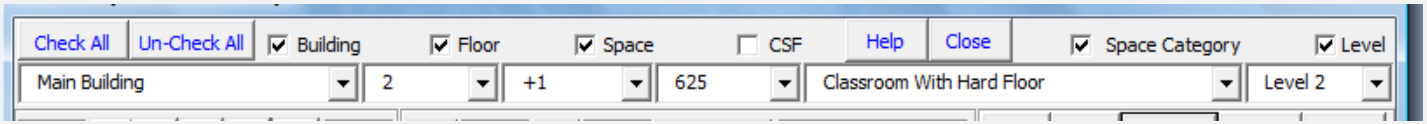
by clicking on it. However, since there is no Undo function, it is recommended that you leave the box checked when pasting to many rows and that you use the **Prompt Confirmation Toolbox** to help avoid unintentional pasting.

Exercise P3-2. Using QEntry to input five (5) records at once

Exercise P3-2. Using **QEntry** to input five (5) records at once

Building	Floor	Space	CSF	Space Category	Level
Main building	2	202	735	Classroom With Hard Floor	Level 2
Main building	2	203	534	Classroom With Hard Floor	Level 2
Main building	2	204	252	Classroom With Hard Floor	Level 2
Main building	2	205	245	Classroom With Hard Floor	Level 2
Main building	2	206	325	Classroom With Hard Floor	Level 2

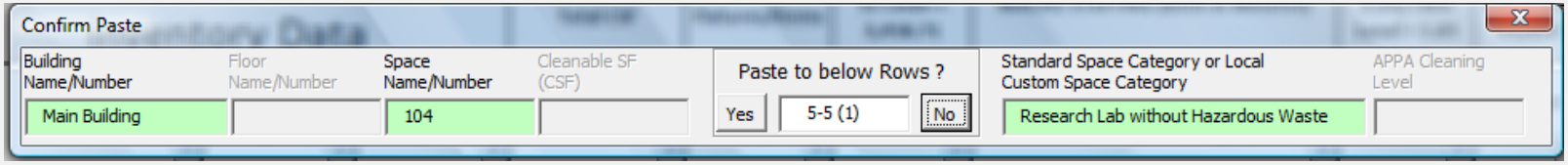
1. Click **Check All Button.**
2. Click the **CSF Checkbox** to uncheck it since this data is different for each record.
3. Enter/select data in QEntry as shown below. Note the +1 in the **Space Box** will cause the Space Number to be increment by 1 from the previous Space Number. You may increment by any number. Since **CSF** is unchecked it does not matter what it contains.



4. Highlight rows 8 through 12 in any column by first clicking in any row except 8 to ensure row 8 is not selected. Then click in row 8 and drag through the row 12. Observe the information in the **Selected Rows Box**. It should indicate 8-12 (5) to confirm which rows are selected.
5. Click **Paste Button** and click **Yes**. Observe data now appears in rows 8 through 12.
6. Type the **CSF** data directly in the data cell in the **Data and Inventory Area.** You should now get .39 FTEs for **Both**, .32 FTEs for **Routine** and .07 for **Projects.**

Exercise P3-3. Using the Paste Confirmation Toolbox and the Copy Button.

Exercise P3-3. Using the **Paste Confirmation Toolbox** and the **Copy Button.**

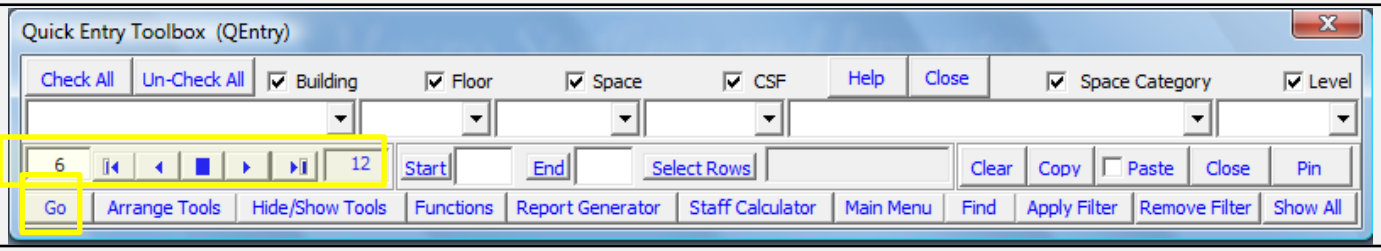


Explanation: Because of the importance of data integrity and accuracy, *CleanOpsStaff-3ed* provides the **Paste Confirmation** Toolbox to help you avoid unintentionally pasting data. The toolbox has the same column headings as the data area and indicates which data elements will be pasted (green background) and which will not (gray background). The **Paste To Box** will indicate which rows the paste will go to.

1. You will copy only **Building, Space Name,** and **Space Category** from row 4 to row 13.
   a. Click **Check All Button.** Click **Clear Button.** Click **Un-Check All Button.** Click individual checkboxes for **Building, Space Name** and **Space Category.**
   b. Click anywhere in row 4. Click **Copy Button.** Observe that data was copied into only those boxes whose checkbox was checked.
   c. Click anywhere in row 13. Ensure the **Paste Checkbox** is checked. Click **Paste Button.** Observe the elements that are grayed out and those that are not. Observe the **Paste to below Rows box** – it should read 13-13 (1).
   d. Click the No Button to cancel paste. Observe that no data were pasted.
   e. Click Paste Button again. This time click yes. Observe data pasted.
   f. Enter data directly to make the space on the 3rd floor, 435 CSF, and Level 3. You should now get .41 FTEs for **Both**, .35 FTEs for **Routine** and .06 for **Projects.**

Procedure 3b. Exploring QEntry records Navigation functions.

Procedure 3b. Exploring **QEntry** records **Navigation functions.**

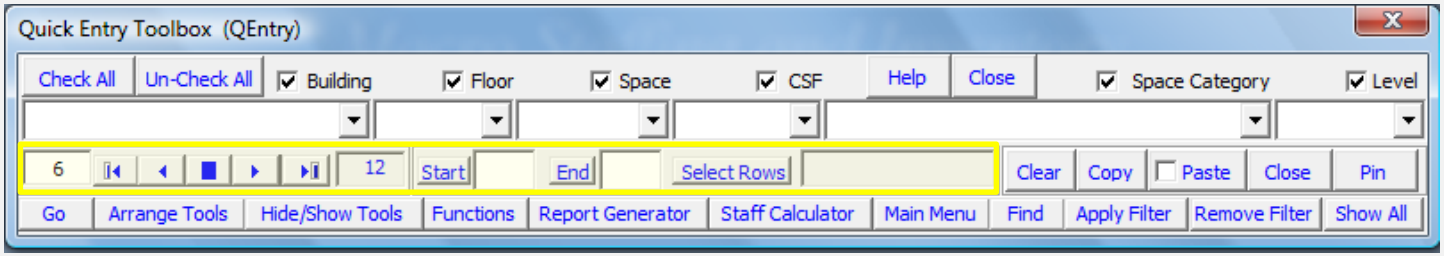


Note: The yellow highlighted area above is the **Records Navigation Tool**. The below text will address the elements of this tool starting from left to right.

1. **Current Record Box** – indicates the current record row number. The above screenshot shows the current record is six (6).
2. **First Record Button** – click to move to and select the first record or row.
3. **Previous Record Button** – click to move to and select the previous record.
4. **Middle Record Button** – click to move to and select the record that is mid way between the first and last record.
5. **Next Record Button** – click to move to and select the Next record.
6. **Last Record Button** – click to move to and select the last record (last row containing data).
7. **Last Record Box** – indicates the row number of the last record . The above screenshot shows the current record is row six (6) and the last row is 12.
8. **Go Button** – click to go to the row number in the **Current Row Box -** you can enter the number you want to go to.

Exercise P3-4. Using QEntry records Navigation functions.

Exercise P3-4. Using **QEntry** records **Navigation functions.**

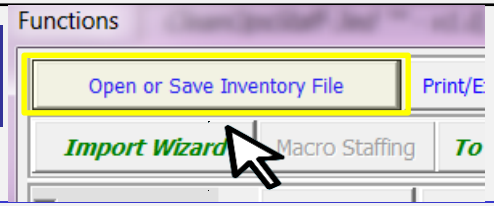


1. Close **QEntry**. Show **MiniToolbox** (click **Hide/Show Button**). Click **Main Menu.**
2. Click **Macro Staffing & Inventory Button** on the **Main menu.**
3. Activate **QEntry** as you learned in previous procedures and exercises by clicking **QEntry** on the MiniToolbox.
4. Click in random columns in all the rows containing data and observe the **Current Record Box** and **Selected Rows Box**.
5. Use the **Shift Key** and **Left Mouse Button** to select ranges of cells with and without data and observe the **Current Record Box** and **Selected Rows Box**. Note: when selecting a range of rows it does not matter which column or how many columns you include in the selected range. *CleanOpsStaff-3ed* only uses the row information of the selected range and ignores the column information in the select range.
6. Use the **CTRL Key** and the **Left Mouse Button** to select random non-adjacent cells and observe that the **Selected Rows Box** does not indicate this type non-adjacent selection.

Data File Management (Open, Save, Save As, Close)

Procedure 4: Data File Management (Open, Save, Save As, Close)

Main Menu Screen



Function Toolbox in Macro Staffing and Inventory Worksheet

1. Once data has been entered into the Staffing and Inventory worksheet you can save the information to a data file. The default location file is ***C:\CleanOpsStaff-3ed Data***. This location can be changed in the **Configuration** screen if you wish. This location contains exercises files shipped by *Hunter Consulting and Training* that you will use in exercises in this user manual.
2. The **Open**, **Save**, **Save As**, and **Close** commands can be accessed from the command bar at the bottom of the **Main Menu** screen.
3. The **Open Data File** and **Save Data File** command can be accessed from the Functions Toolbox in the Macro Staffing and Inventory screen. These commands work the same as **Open** and **Save** with only a slight variation.
4. These command can also be accessed by using the Right-Click Short Cut interface. Simple right click in any cell of a worksheet and select the desired command from the pop-up short cut menu.

Data File Management (Open, Save, Save As, Close)

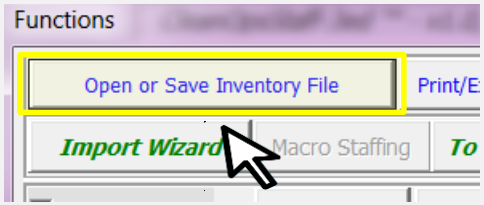
Exercise P4-1: Open, Save As, Close and Save Data and Inventory File

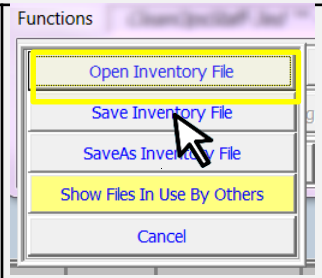
Main Menu Screen

1. You will open the data file ***Exercise P1-1 Results-HECS-Data.xls***. NOTE: Read all the message boxes as you do this exercise.
2. **OPEN→** In the **Main Menu** screen click the **Open** button. Navigate to ***C:\CleanOpsStaff-3ed Data*** **if necessary**. Double click on ***Exercise P1-1 Results-HECS-Data.xls.*** Click **Yes.** After the file is loaded and validated, click **Ok.**
3. Click **Macro Staffing and Inventory** button. Observe six records.
4. **SAVE AS→** In the **Main Menu** screen. Click the **Save As** button.
5. To see existing list of data files on your disk click the **Save** button in the **Save Inventory and Data** dialog box. Note that "***-HECS-Data.xls***" is appended to Inventory files by CleanOpsStaff-3ed. You should not type this extension when naming your inventory files.
6. Click Once on ***Exercise P1-1 Results-HECS-Data.xls*** and change name to ***My Exercise P1-1 Results-HECS-Data.xls.*** Click **Save** again. Click **Yes**. Click **Ok**.
7. **CLOSE→** In the **Main Menu** screen. Click the **Close** button. Click **Yes.**
8. Click **Macro Staffing and Inventory** button. Observe there are no records.
9. Using Procedure in Step 2 above, open ***My Exercise P1-1 Results-HECS-Data.xls.*** Go to the Macro Staffing and Inventory screen and change 150 CSF to 325 CSF for room 100.
10. **SAVE →** In the **Main Menu** screen. Click the **Save** button. Click **Yes**. Click **Ok**.
11. **CLOSE→** In the **Main Menu** screen. Click the **Close** button. Click **Yes.**

Data File Management (Open, Save, Save As, Close)

Exercise P4-2: Open Data File, Save Data File, Close and Save Data and Inventory File



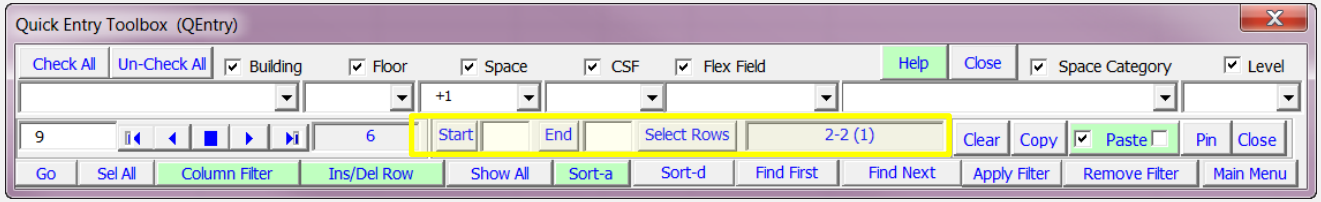


Function Toolbox in Macro Staffing and Inventory Worksheet

1. You will open the data file ***My Exercise P1-1 Results-HECS-Data.xls***. NOTE: Read all the message boxes as you do this exercise.
2. **OPEN INVENTORY FILE:** Go to **Macro Staffing and Inventory** worksheet. In the **MiniToolbox**, click **Functions.** Then click the **Open or Save Inventory File** button.
3. Click the ***Open Inventory File*** button in the dropdown tool
4. Scroll down and Click on ***My Exercise P1-1 Results-HECS-Data.xls*** and click **Ok.**
5. Click **Yes.** After the load and validation process click **Ok.**
6. **SAVE INVENTORY FILE(same name):** Go to **Macro Staffing and Inventory** worksheet. In the **MiniToolbox**, click **Functions.** Click **Open or Save Inventory File .** Click **Save Inventory File**. Click **Yes**. Click **Ok**. Note: if you did not want to overwrite the file, you could have clicked **No** when prompted and you would have been given an opportunity to save the file under a different name.
7. **SAVE INVENTORY FILE (different name):** Go to **Macro Staffing and Inventory** worksheet. Click **Functions. Click Open or Save Inventory File .** Click **Save Inventory File.** Click **No**. Click **Yes**. Click **Save** to see existing Inventory files.
8. Click once on ***My Exercise P1-1 Results-HECS-Data.xls*** and change name to ***My Second Exercise P1-1 Results-HECS-Data.xls***. Click **Save.** Click **Yes**. Click **Ok.**

Procedure 5. Exploring QEntry records Selection functions.

Procedure 5. Exploring **QEntry** records **Selection functions.**

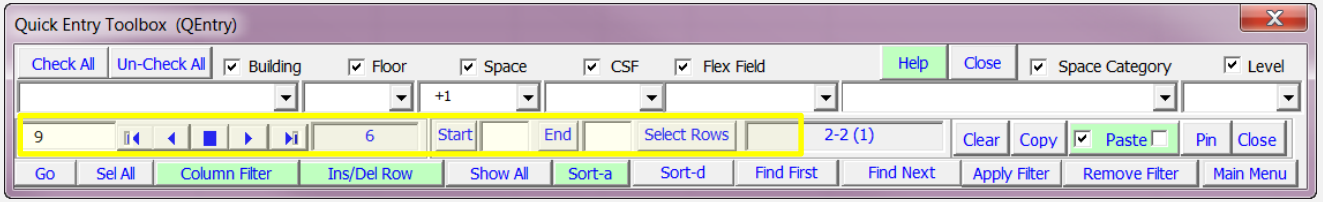


Note: The yellow highlighted area above is the Records Selection Tool. The below text will address the elements of this tool starting from left to right.

1. **Range Selection Start Button** - click to copy the current active row number into the **Range Selection Start Box** to mark the beginning of a range of rows you will select with the **Select Rows Button**.
2. **Range Selection Start Box** - contains the beginning of a range of rows you will select.
3. **Range Selection End Button** - click to copy the current active row number into the **Range Selection End Box** to mark the end of a range of rows you will select with the **Select Rows Button**.
4. **Range Selection End Box** - contains the end of a range of rows you will select.
5. **Select Rows Button** - click to select range rows beginning with row number in the **Range Selection Start Box** and ending with row number in the **Range Selection End Box .**
6. **Selected Rows Box** - indicates the rows selected by the **Select Rows Button** or selected by drag through rows in the **Data and Inventory Area**.

Exercise P5-1. Using QEntry records Selection Tool.

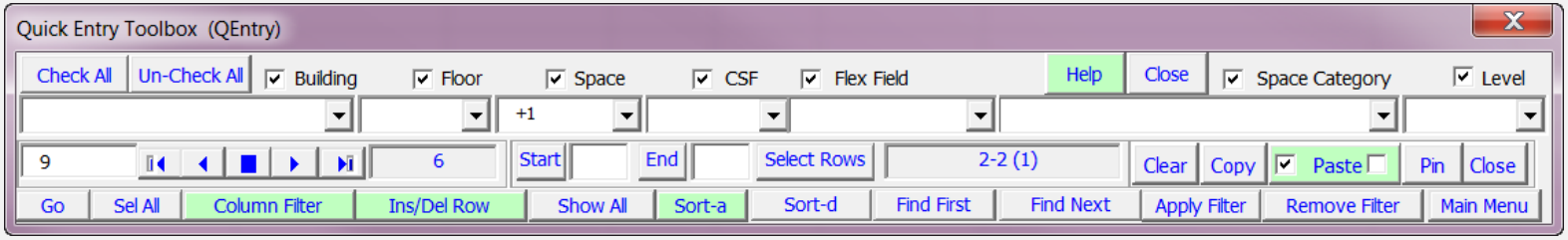
Exercise P5-1. Using **QEntry** records **Selection Tool.**



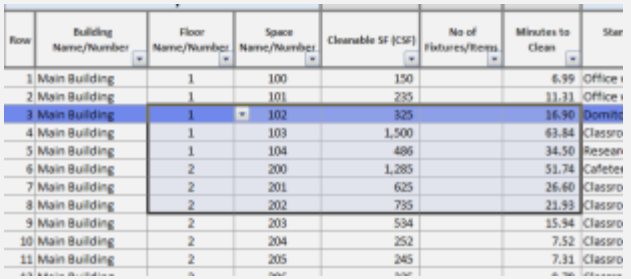
1. Open data file ***Exercise P5-2 Results-HECS-Data.xls***. With **QEntry** activated, click anywhere in row 4 in the **Data and Inventory Area** and then click the **Start Button**. Observe the **Start Row Box** – it should contain 4. Observe the **Selected Rows Box** – it should contain 4-4 (1).
2. Click anywhere in row 11 and then click the **End Button**. Observe the **End Row Box** – it should contain 11. Observe the **Selected Rows Box** – it should contain 11-11 (1).
3. Click **Select Rows Button.** Observe **Selected Rows Box** – it should contain 4-11 (8).
4. Observe the **Data and Inventory Area** – a range encompassing rows 4 through 11 should be highlighted and selected.
5. Click the **Middle Record Button** – observe that row 7 is select which is about half way in the data base. It will not be exactly half if you have an even number of records.
6. Type ***10*** in the **Current Row Box** and click the **Go Button**. Observe the **Blue Current Row Indicator** goes to row 10 and the **Selected Rows Box** contains 10-10(1).
7. Select a range of rows from 2 to 12 using the record select tool. (a) Type 2 in the **Start Box ,** (b) type 12 in the **End Box**, (c) click the **Select Rows Button** - the **Selected Rows Box** should contain 2- 12(11)

Selecting Records in Macro Staffing & Inventory Worksheet (cont.)

Exercise P5-2. Using **QEntry** records **Selection Tool and Go Button.**



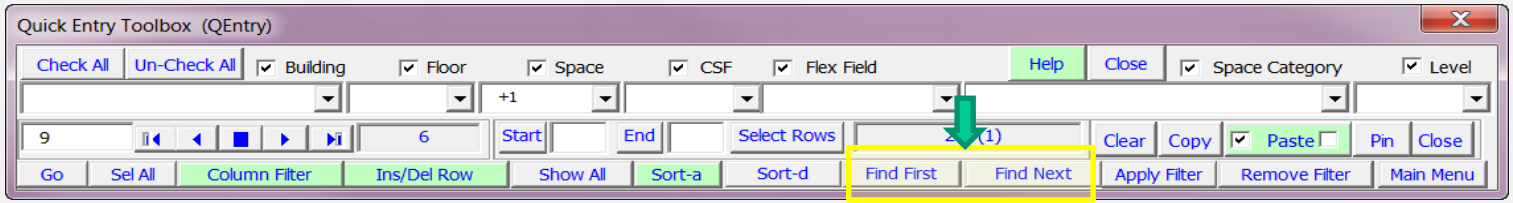
1. With **QEntry** activated, type 7 in the **Current Record Box** and click the **Go Button.** Observe that row 7 in now selected.
2. Click and hold down the left mouse button in the **Floor** column in row 3. While holding down the left mouse button, drag to row 8 under **Minutes to Clean Column** as shown:
3. Observe the **Current Record Box** and **Select Rows Box.** The top row number of the range is in the **Current Record Box** and the selected range row as well as the number of rows selected are displayed in the **Selected Rows Box.**
4. Click the First Record Button to return the blue **Active Row Indicator** to the first row.



Row	Building Name/Number	Floor Name/Number	Space Name/Number	Cleanable SF (CSF)	No of Fixtures/Items	Minutes to Clean	Star
1	Main Building	1	100	150		6.99	Office
2	Main Building	1	101	235		11.31	Office
3	Main Building	1	102	325		16.90	Domit
4	Main Building	1	103	1,500		63.84	Classro
5	Main Building	1	104	486		34.50	Resear
6	Main Building	2	200	1,285		51.74	Cafeter
7	Main Building	2	201	625		26.60	Classro
8	Main Building	2	202	735		21.93	Classro
9	Main Building	2	203	534		15.94	Classro
10	Main Building	2	204	252		7.52	Classro
11	Main Building	2	205	245		7.31	Classro

Procedure 6. Exploring QEntry records Find Function.

Procedure 6. Exploring **QEntry** records **Find Function**.

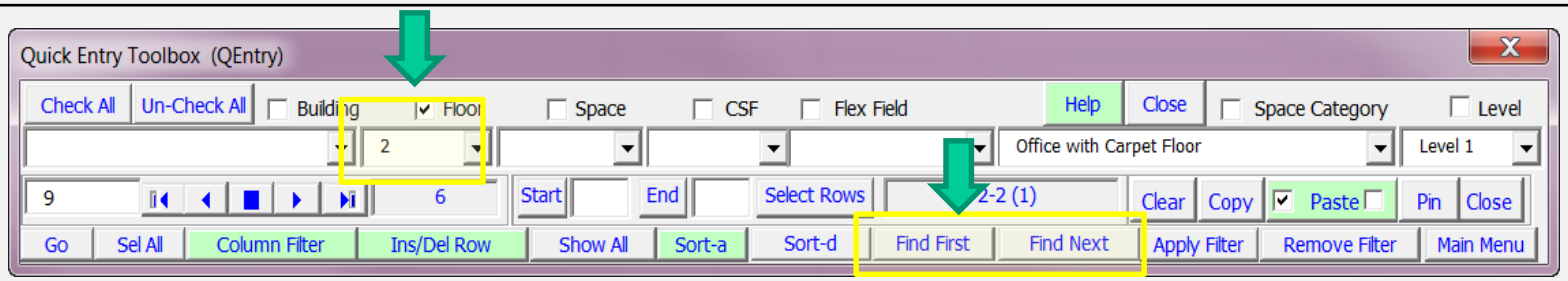


Note: The yellow highlighted area above is the Records Find and Filter Tool. The below text will address the elements of this tool starting from left to right.

1. **Find First and Find Next Buttons** – Find records that match the data contained in input boxes where the input box corresponding checkbox is checked.
   a. Check checkboxes of corresponding input boxes you want included in the search criteria.
   b. Type, select or copy in the values you want to search for.
   c. If you want to find the first occurrence, click the **Find First Button** start at the top of the worksheet.
   d. Click **Find Next Button** to find the next occurrence of a record that match the values in the **QEntry** input boxes that have their checkboxes checked.

Exercise P6-1. Using the QEntry records Find Function.

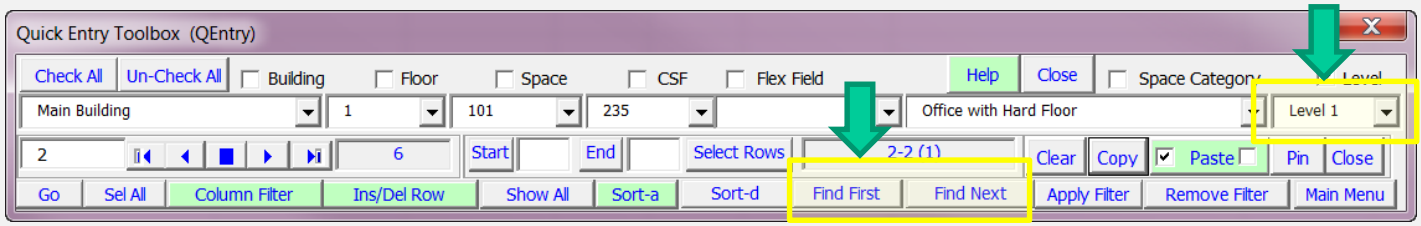
Exercise P6-1. Using the **QEntry** records **Find Function**. Open File ***Exercise P6-2 Results-HECS-Data.xls***



1. You will find all second floor records. Click the **Un-Check All Button.** Click the **Floor Checkbox.** Type ***2*** in the **Floor Box**. Click the **Find First Button.** Observe the Active Row Indicator goes to row 6 (first record for the second floor).
2. Click **Find Next Button** seven (7) more time and observe that each second floor record is found. Observe the message you get at the last record and click **OK**.
3. You will find space 203 on the second floor. Click the **Space Checkbox.** Type the ***203*** in the **Space Box**. Click **First Record Button**. Click the **Find Button.** Observe the Active Row Indicator goes to row 9 (record for **Space 203 on the second floor**).
4. You will find **Cafeteria with Hard Floor**. Click **Un-Check All Button.** Click the **Space Category Checkbox.** Select ***Cafeteria with Hard Floor*** from dropdown list in **Space Category Box.** Click **First Record Button**. Click the **Find Button.** Observe the Active Row Indicator goes to row 6.

Exercise P6-2. Using the QEntry records Find, Clear, and Copy Function.

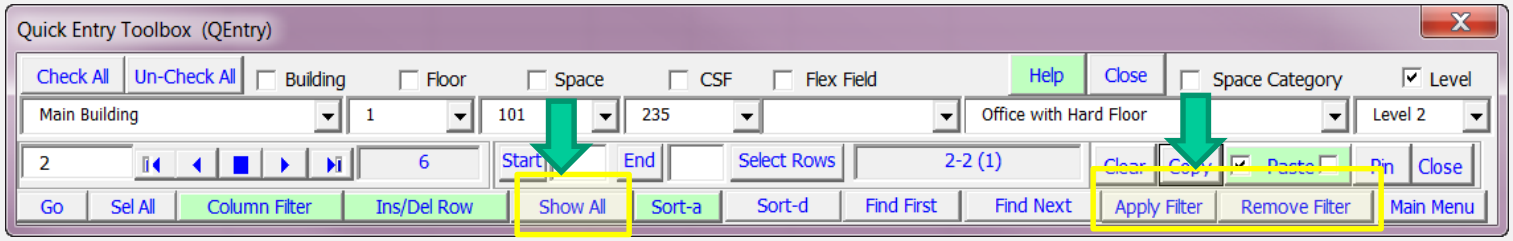
Exercise P6-2. Using the **QEntry** records **Find, Clear, and Copy Function.** Open File ***Exercise P6-2 Results-HECS-Data.xls***



1. You will find space cleaned at Level 1. Click **Un-Check All Button.** Click the **Level Checkbox.** Select ***Level 1*** from dropdown list in **Level Box.** Click **Find First Button**. Click the **Find Next Button** twice while observing the Active Row Indicator goes to row 3 then to row 6. Click **Find Button** and click **OK.**
2. You will find space cleaned at Level 1 on the first floor only. Click **Floor Checkbox.** Type ***'1'*** in the **Floor Box.** Click **Find First Record Button**. Click **Find Next Button** once while observe the Active Row Indicator goes to row 3. Click **Find Button** again and click **OK.**
3. You will clear all QEntry input boxes. Click **Check All Button.** Click **Clear Button**. Observe all input boxes are now blank.
4. You will copy record into **QEntry**. Type ***5*** in the **Current Record Button**. Click **Go.** Click **Copy Button.** Observe that all the QEntry input boxes are filled by data from row 5.
5. You will paste the contents of QEntry to row 14 for a third floor identical space. In QEntry, Edit the **Floor Box** by replacing ***1*** with ***3*** and edit the **Room number** to ***304***. Click anywhere in row 14. Click **Paste Button** and click **Yes** if necessary. Observe that row 14 is identical to row 5 except for **Floor number and Room number**.

Procedure 7a. Exploring QEntry records Filter Function

Procedure 7a. Exploring **QEntry** records **Filter Function** .

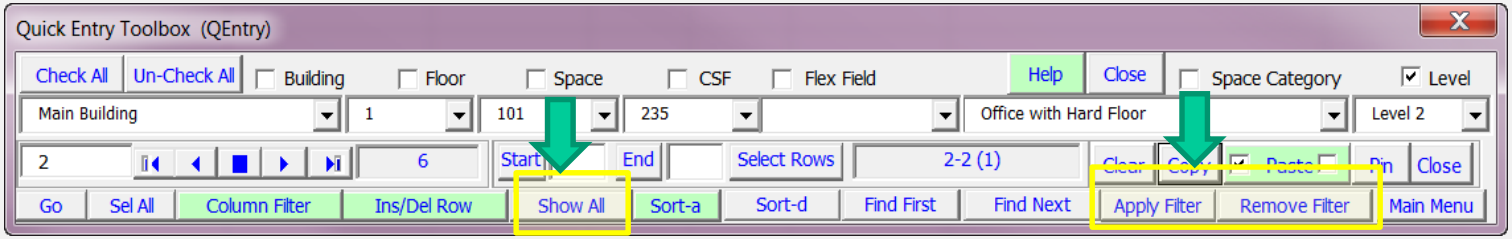


1. **Apply Filter Button** – Display only records that match the data contained in input boxes where the input box corresponding checkbox is check.
   a. Check checkboxes of corresponding input boxes you want included in the filter criteria.
   b. Type, select or copy in the values you want to match.
   c. Click **Apply Filter Button.**

Note: The corresponding column filter in the **Data and Inventory Area** will be set to match the checked input boxes in **QEntry.** Therefore, only records matching the value corresponding checked input boxes will be displayed.

Procedure 7b. Exploring QEntry records Remove Filter Function.

Procedure 7b. Exploring **QEntry** records **Remove Filter Function.**

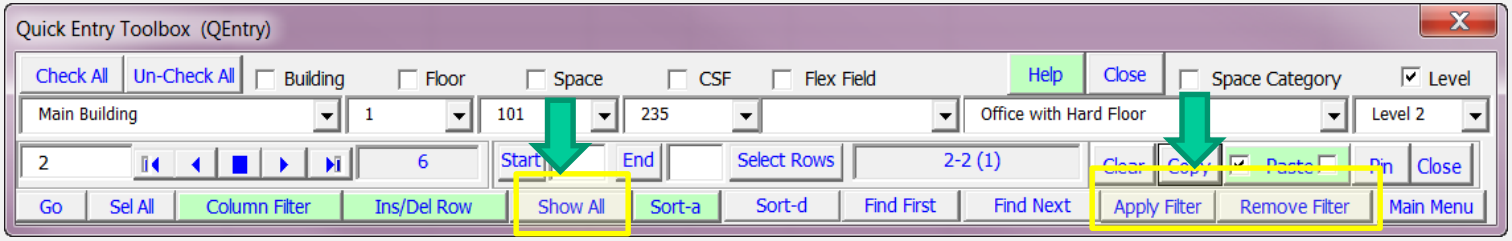


1. **Remove Filter Button** – Remove filter criteria from the corresponding **Data and Inventory Area** column.
   a. Check checkboxes of corresponding input boxes you want to remove the filter from.
   b. It does not matter what value is in the input box in order for the filter to be removed from the corresponding column as long as the corresponding checkbox is checked.
   c. Click **Remove Filter Button.**

Note: If the corresponding column filter in the **Data and Inventory Area** was set to filter on, the filter will be removed. If the column was not filtered, then no change will occur.

Exercise P7-1. Exploring QEntry records Filter Function

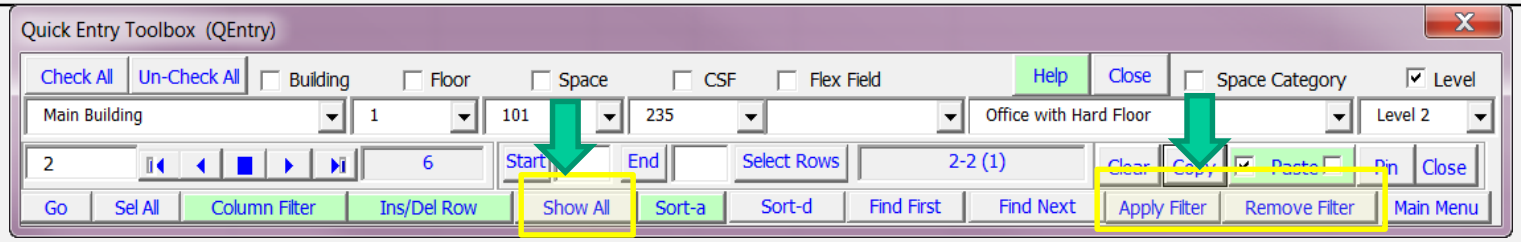
Exercise P7-1. Exploring **QEntry** records **Filter Function.**
Open File (*Exercise P7-all Results-HECS-Data.xls*)



1. Open ***Exercise P7-all Results-HECS-Data.xls***
2. You will filter on ***Cafeteria with Hard Floor*** space category
   a. Click anywhere in the row 8. Then click **Copy** in QEntry.
   b. Click **Un-Check All** button. Click The **Space Category** checkbox.
   c. Click **Apply Filter Button.** Observe that only the 6 records with ***Cafeteria with Hard Floor*** space category are shown. Records (6-9 and 10-12)
   d. Click the **Remove Filter** button. Observe that all records are now visible.
3. You will filter on ***Classroom With Carpet Floor*** space category
   a. Select ***Classroom With Carpet Floor*** from **Space Category** dropdown list
   b. Click **Apply Filter Button.** Observe that only the 3 records with ***Cafeteria with Hard Floor*** space category are shown. Records (4, 7 and 13)
   c. Click **Show All** button. Observe that all records are now visible.

Exercise P7-2. Exploring QEntry records Filter Function

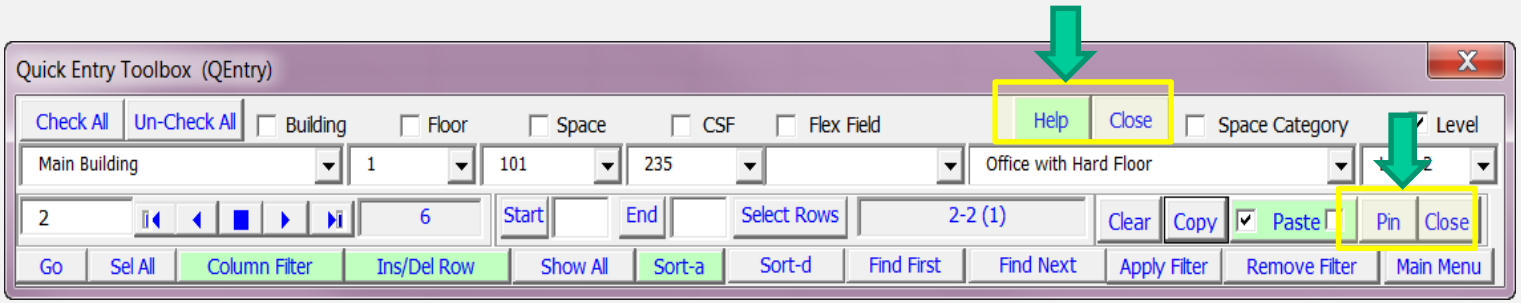
Exercise P7-2. Exploring **QEntry** records **Filter Function.**
Open File (*Exercise P7-all Results-HECS-Data.xls*)



1. Open ***Exercise P7-all Results-HECS-Data.xls*** if necessary.
2. You will filter on ***Classroom With Carpet Floor*** space category cleaned at Level 3
   a. Select ***Classroom With Carpet Floor*** from **Space Category** dropdown list
   b. Select **Level 3** in the **Level Box** and Check the **Level Checkbox**
   c. Click **Apply Filter Button.** Observe that only the 2 records with ***Cafeteria with Hard Floor*** space category and **Level 3** cleaning level are shown. Records (4 and 13)
3. You will remove only the **Level Filter**
   a. Uncheck the **Space Category Checkbox**
   b. Click the **Remove Filter** button. Observe that 3 records with ***Cafeteria with Hard Floor*** space category are shown because the Level filter was removed. Records (4, 7 and 13)
   c. Click the **Show All** button.

Procedure 9. Exploring QEntry Application Navigation Buttons

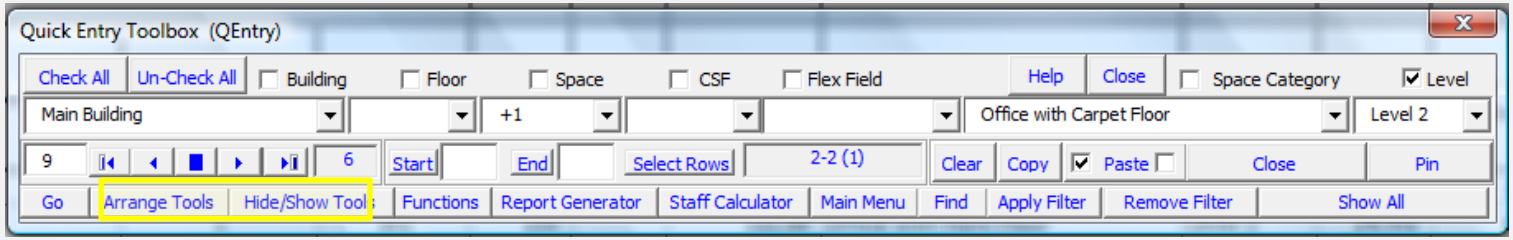
Procedure 9. Exploring **QEntry** Application Navigation Buttons.



1. **Help Button** – Click to get contextual help on the **QEntry Toolbox.**
2. **Close Buttons** – Click to close **QEntry.** There are two **Close Buttons** so you can close while in **Tall Mode** and **Short Mode**.
3. **Pin Button** – Click to pin the **QEntry Toolbox** to its current location on the screen. Under certain conditions, you might want the tool to appear in certain locations on the screen. (**Note**: most toolboxes have a **Help**, **Pin** and **Main Menu** buttons.)

Procedure 10. Exploring QEntry Tool Management Buttons

Procedure 10. Exploring **QEntry** Tool Management Buttons.

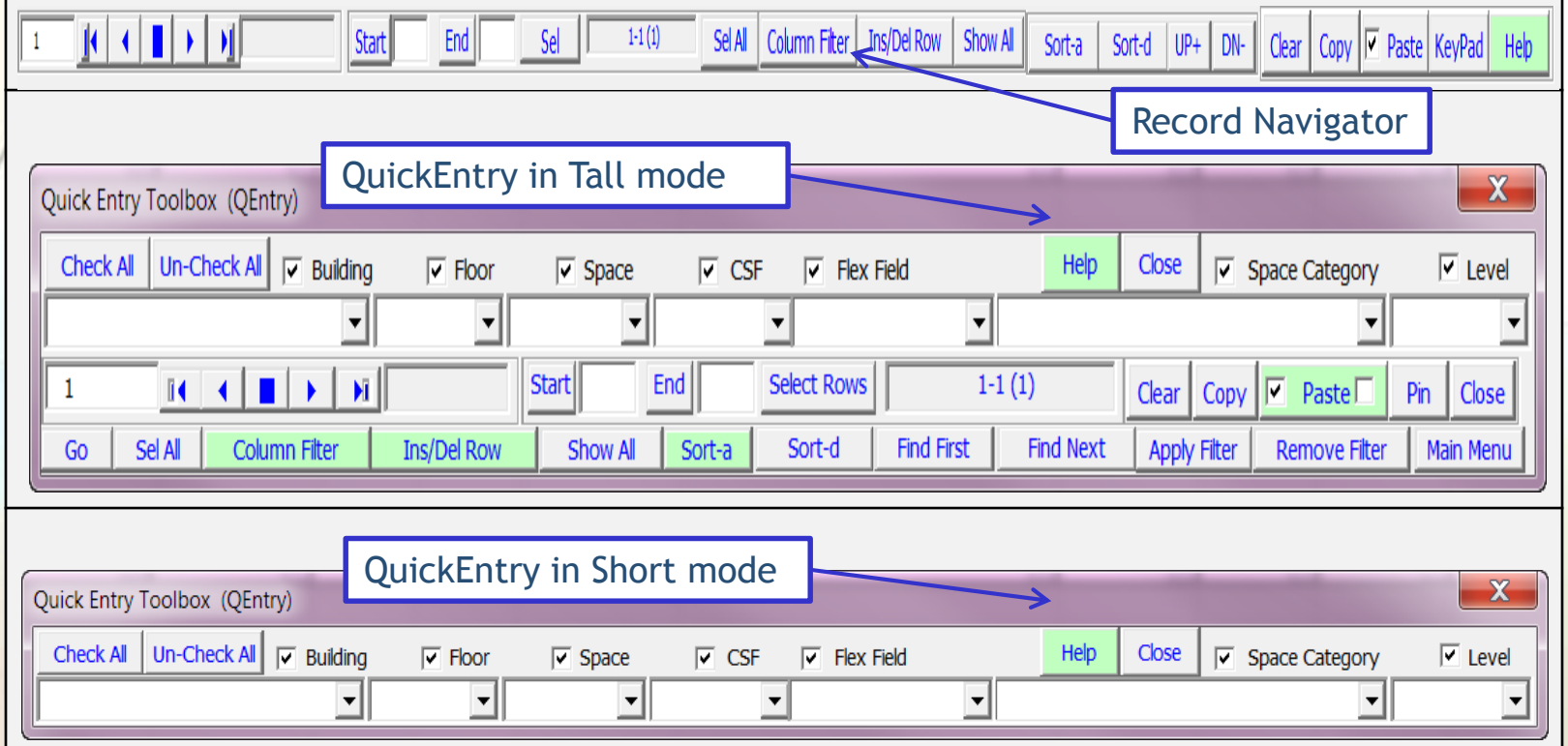


1. **Arrange Tools Button** – This button manages the arrangement on the screen of the **Functions**, **Report Generator**, and **Staff Calculator** toolboxes relative to the screen location of **QEntry.** The purpose of this feature is to give you quick control of the four tools (**Functions**, **Report Generator**, and **Staff Calculator** , and **QEntry).**
   a. Click **Arrange Tools Button** and all three other tools will appear in one of the Four pre-set **Tiled** and **Cascaded** arrangements.
   b. Click **Arrange Tools Button** again to cycle through the pre-set tool arrangement.
   c. Drag **QEntry** to a different location on the screen and repeat above steps and the three tool will appear immediately below QEntry.
2. **Hide/Show Tools Button** – Toggle between hiding and showing the three tools.

Note: The idea here is for you to be able to quickly display the tool you need and quickly close the one you do not intend to use at the moment.

Procedure 11. Exploring the Record Navigator Common Command Buttons

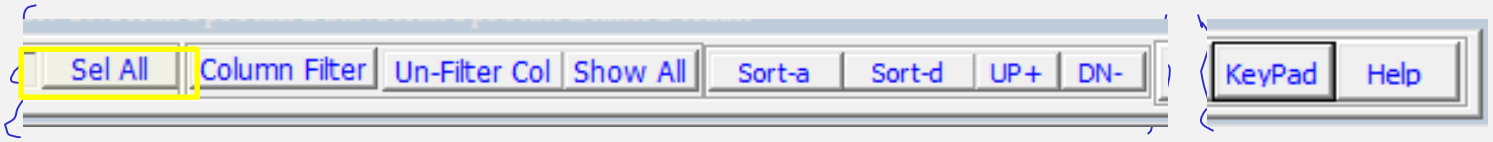
Procedure 11. Exploring **the Record Navigator and QEntry Common Command Buttons**



1. The Record Navigator is a handy toolbox that is directly above the worksheet. It contains many of the same command buttons as the QEntry. The command buttons that are common to both tools work the same regardless of which one you click. The Record Navigator can be used in conjunction with QEntry. See the previous procedures and exercises for use of these common buttons.

Procedure 12a. Exploring the Record Navigator Sel All Command Button

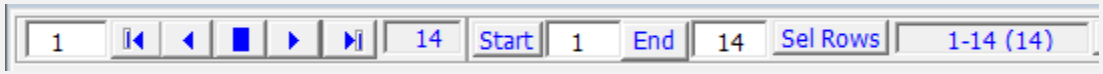
Procedure 12a. Exploring **the Record Navigator Sel All Command Button**



1. **Sel All**. This button will select all records in the worksheet. Use this button only when you want to perform an action on the entire worksheet.

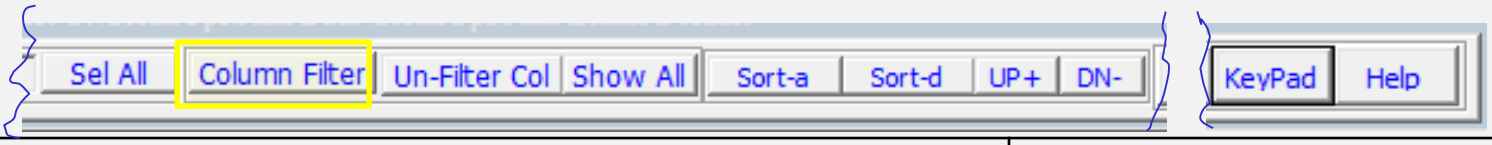
Exercise P12-1. Using the Sel All button. Open File (*Exercise P7-all Results-HECS-Data.xls*)

1. Open File ***Exercise P7-all Results-HECS-Data.xls***
   a. While in the **Data and Inventory** worksheet on the Mini-Toolbox, click **Function** button
   b. Click **Open Data File** button. Double Click on ***Exercise P7-all Results-HECS-Data.xls***
   c. Click **Yes.** After the file load and validation process, click **OK.**
   d. Click **Data and Inventory** button. Observe the 14 records.
2. Click inside any row in any column.
3. Click the **Sel All** button. Observed that the column you clicked inside of above is highlighted and all 14 records are selected. Also observe the record indicator boxes on the **Record Navigator**

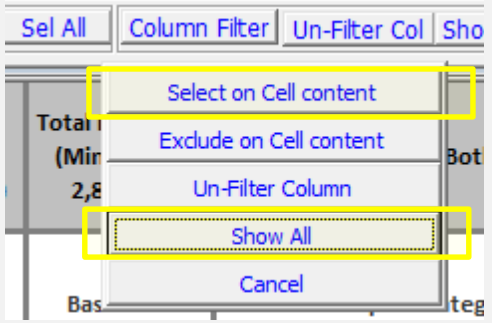


Procedure 12b. Using the Select on Cell Content button

Procedure 12b. Using the **Select on Cell Content** button. Open File (***Exercise P7-all Results-HECS-Data.xls***)



1. **Column Filter**. This button will filter the records in the worksheet based on the content of the selected cell. When you click on this button a drop down tool appears with five sub-commands as seen to the right. You may (a) select records containing the content of the selected cell; (b) exclude records containing the content of the selected cell; (c) Un-filter the column; (d) show all records or (e) cancel



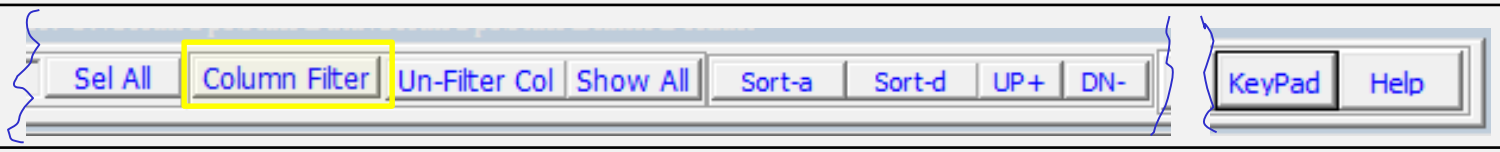
Exercise P12-2. Using the **Select on Cell Content** button. Open File (***Exercise P7-all Results-HECS-Data.xls***)

1. Open File ***Exercise P7-all Results-HECS-Data.xls*** if not already open.
2. Click on *Cafeteria with Hard Floor* in row 8.
3. Click **Column Filter** button. Then click **Select on Cell Content** button. Observe that the six records that contain *Cafeteria with Hard Floor* are visible (6-9 and 10-12).
4. Click **Column Filter** button. Then Click **Un-Filter Column** button. Observe that all records are now visible.

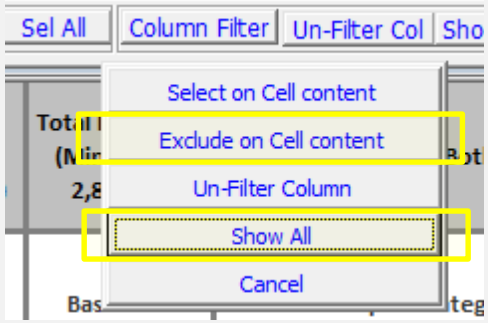
Note that the **Un-Filter** and **Show All** button are directly on the **Record Navigator** as well as the dropdown tool for easy access.

Exercise P12-2. Using the Exclude on Cell Content button

Exercise P12-2. Using the **Exclude on Cell Content** button. Open File (***Exercise P7-all Results-HECS-Data.xls***)



1. Open File ***Exercise P7-all Results-HECS-Data.xls*** if not already open.
2. Click on *Cafeteria with Hard Floor* in row 8.
3. Click **Column Filter** button. Then click **Exclude on Cell Content** button. Observe that six records that contain *Cafeteria with Hard Floor* are visible (1-5, 7 and 13-14).
4. Click **Column Filter** button. Then Click **Show All** button. Observe that all records are now visible.

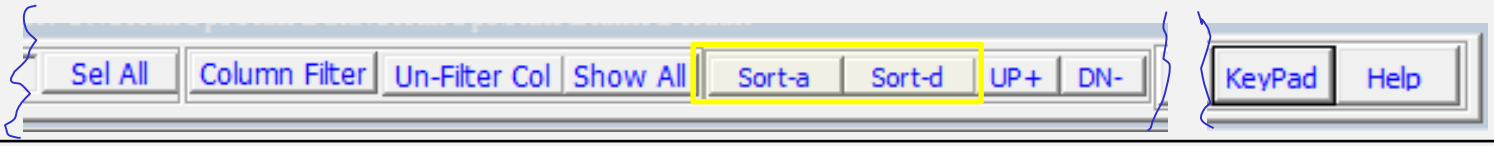


Note that the **Un-Filter** and **Show All** button is directly on the **Record Navigator** as well as the dropdown tool for easy access.

Note that the different between the **Show All** button and the **Un-Filter Column** button is that the **Show All** button removes the filter from all columns and the **Un-Filter** button removes the filter only from the selected column.

Procedure 13. Using the Sort-a and Sort-d buttons.

Procedure 13. Using the **Sort-a** and **Sort-d** buttons. Open File (***Exercise P7-all Results-HECS-Data.xls)***



You can sort the records in the **Data and Inventory** worksheet in ascending and descending using the **Sort-a** and **Sort-d** buttons. To sort the records back to their original order sort on the **Default Row Seq** column using the **Sort-a** button.

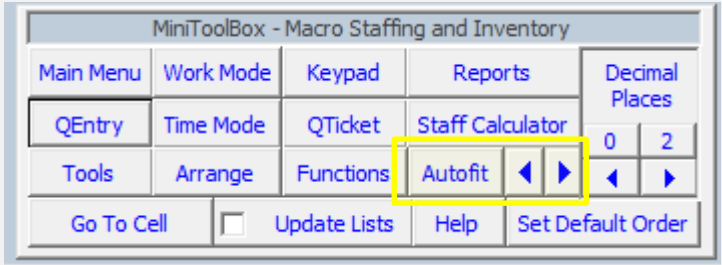
Exercise P13-1: Sorting records

1. Open File ***Exercise P7-all Results-HECS-Data.xls*** if not already open.
2. Click in **Floor Name/Number** column in any row. Click **Sort-d** button. Observe that record are sorted by floor number in descending order.
3. Click **Sort-a** button. Observe that record are sorted by floor number in ascending order.
4. Repeat steps 2 and 3 above for all the data columns while observing the resulting record sort order.
5. To sort the record back to their original order, click in then **Default Row Seq** column and click the **Sort-a** button. Observe that the records are returned to their original sort order.

Procedure 14. Autofit and Column Adjustment

Procedure 14. **Autofit** and **Column Adjustment** . Open File (***Exercise P7-all Results-HECS-Data.xls***)

1. **Autofit** and **Column Adjustment** features. You and adjust the width of the columns in the worksheet by using the commands outlined in the screenshot to the right.



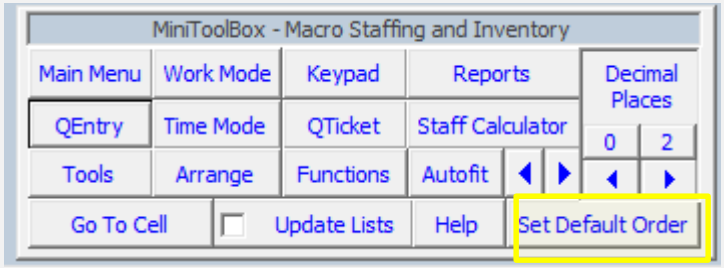
1. Exercise P14-1: Adjusting Column width

1. Open File ***Exercise P7-all Results-HECS-Data.xls*** if not already open.
2. Click inside the Building Name/Number Column and then click the **Autofit** button. Observe that the column width adjusted to match the widest text in the column.
3. Repeat step 2 for random columns and observe the effect.
4. Click the inside of random columns and click the left and right arrows and observe the column width change.
5. Select a range of columns and experiment with the Autofit and Right and Left buttons and observe that you can change the width of a range of columns as once.
6. Use the CTRL key to select non-adjacent columns and experiment with the Autofit and Right and Left buttons and observe that you can change the width of multiple non-adjacent column as once.

Procedure 15. Set Default Order feature.

Procedure 15. **Set Default Order** feature. Open File (***Exercise P7-all Results-HECS-Data.xls***)

1. **Set Default Order** feature. You can sort the records in different order and then make the new order the default order by using the **Set Default Order** button.



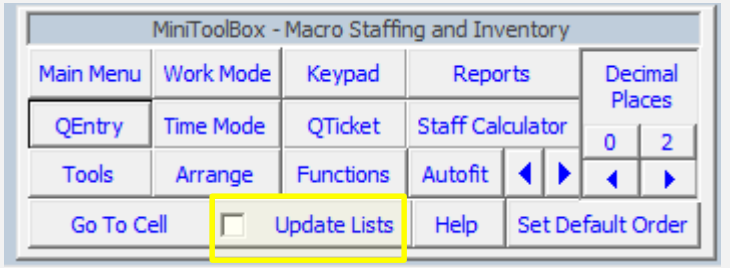
Exercise P15-1: Using the **Set Default Order** feature.

1. Open File ***Exercise P7-all Results-HECS-Data.xls*** if not already open.
2. Click in the **Space Name/Number** column.
3. Click the **Sort-d** button. Observe the numbers in the **Default Row Order** column are now out of order. If you would like for the current of the records to be the default order you would use the **Set Default Order** button.
4. Click the **Set Default Order** button. Click **Yes**. Observe that the numbers in the **Default Row Order** column are now in order. You can now user the **Sort-a** button and sort on **Default Row Order** column to return the order of the records to this current order after any other sort you make.

Procedure 16. Update Dropdown Lists feature

Procedure 16. **Update Dropdown Lists** feature. Open File (***Exercise P7-all Results-HECS-Data.xls***)

1. **Update Dropdown Lists** feature. Use this button to update the dropdown lists in the worksheet and QEntry. The Building, Floor, and Space fields in the worksheet and QEntry have dropdown lists that can be updated to capture all previous entries made. This allows you to select previously entered data from the dropdown list instead of re-typing it. In order to update the dropdown list click the **Update Dropdown Lists** button. To have the dropdown list update automatically, check the checkbox.



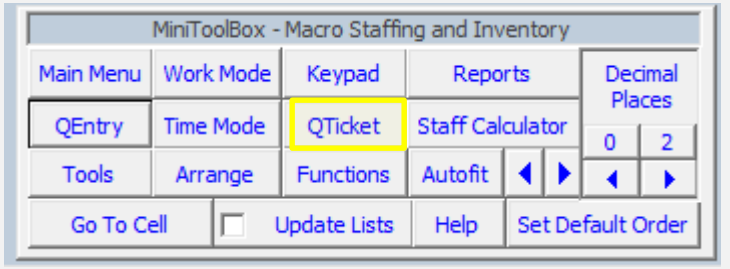
Exercise P16-1: Using the **Update Dropdown Lists** feature.

1. Open File ***Exercise P7-all Results-HECS-Data.xls*** if not already open.
2. Click in Row 15 in the **Building** Column and type **Admin Building** and press the **Enter**.
3. Click in Row 16 in the **Building** column. Click the dropdown arrow and observe that only **Main Building** is in the dropdown list.
4. Click the **Update Dropdown Lists** button and repeat Step 3 above and observe that the drop list now contains **Main Building** and **Admin Building** in alpha order.
5. Click the **Update Dropdown Lists checkbox** to make the update automatic.
6. Click in Row 16 in the **Building** Column and type **Science Building** and press the **Enter**.
7. Now click the dropdown arrow and observe that **Science Building** has been added to the dropdown list.

Exploring QTicket

Procedure 17. Exploring QTicket. Open File (***Exercise P7-all Results-HECS-Data.xls***)

1. **QTicket**. Use this button to activate the **Quick Ticket** feature. This feature allows you to make quick calculation of multiple records and then send the calculations to other Microsoft applications such as NotePad, Word, PowerPoint, and Excel and to the printer.



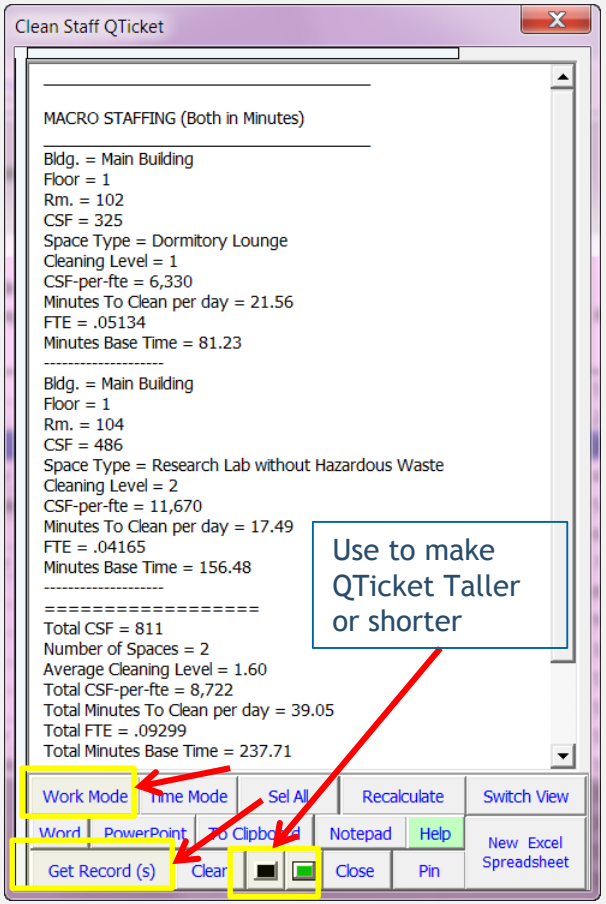
One example of use is when you want to know how much time it should take to clean several spaces in your inventory. You can select these spaces of interest and "Get Record(s)" into the QTicket and QTicket will calculate:

a. Total CSF
b. Number of Spaces
c. Average Cleaning Level
d. Total CSF/FTE
e. Total Minutes To Clean per day
f. Total FTE
g. Total Minutes Base Time

Exercise 17-1a. Using QTicket Get Record(s)

Exercise 17-1a. Using QTicket **Get Record(s)** . Open File (***Exercise P7-all Results-HECS-Data.xls***)

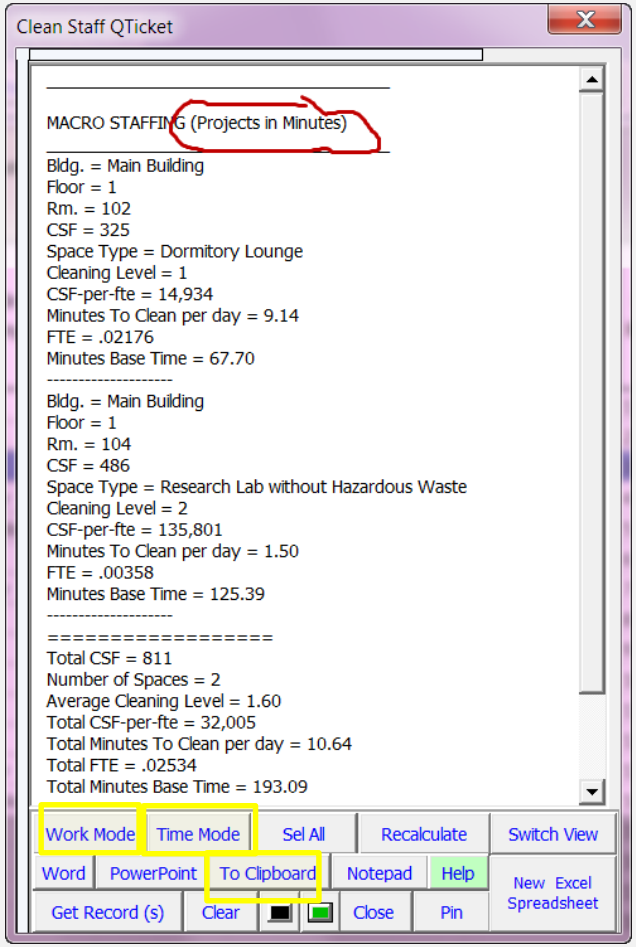
1. Open File ***Exercise P7-all Results-HECS-Data.xls*** if not already open.
2. You want to know how much time it will take to clean Spaces 102 and 104 of the first floor.
3. Click the **QTicket** button on QEntry.
4. Select Space 102 and click the **Get Record(s) button.**
5. Select Space 104 and click the **Get Record(s) button. Scroll down in QTicket and observe the summary calculations at the bottom of the large textbox. You can see that the two spaces together are 811 CSF. The Average Cleaning Level is 1.6 since one of the spaces is cleaned at Level 1 and the other is cleaned at Level 2. The CSF/FTE is 8,722. You must set aside 39.05 minutes per day to clean the two spaces at the specified levels. The two spaces require .09299 FTEs and to do both the Routine and Projects tasks in both rooms all in one visit would take 237.71 minutes.**
6. Click the **Work Mode** button and observe the data for **Routine** tasks (Total Minutes Base Time = 44.62).



Exercise 17-1b. Using QTicket Work Mode & Time Mode

Exercise 17-1b. Using QTicket **Work Mode** & **Time Mode**. Open File (***Exercise P7-all Results-HECS-Data.xls)***

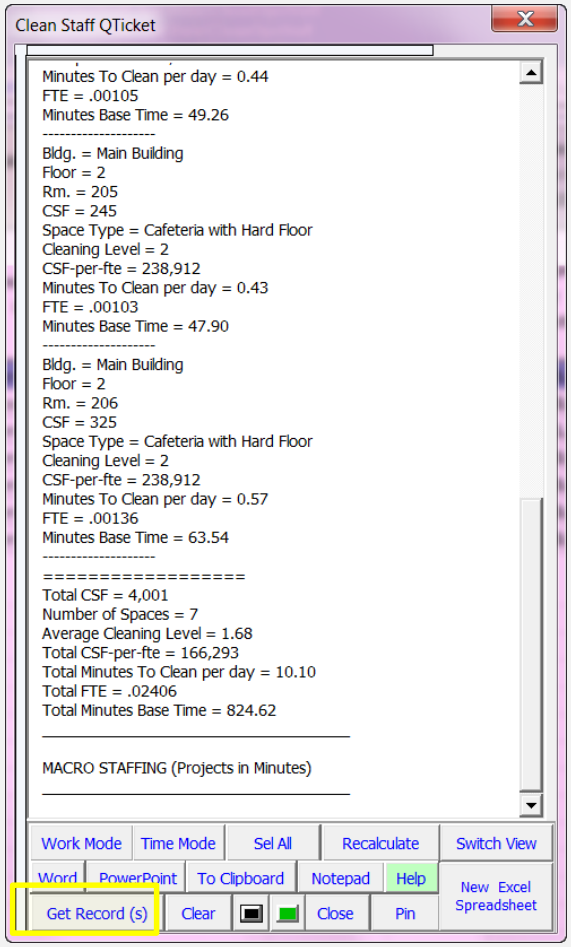
1. Click the **Work Mode** button again and observe the data for **Projects** tasks (Total Minutes Base Time = 193.09).
2. Click the **Work Mode** button again to show calculation for **Both** Projects and Routines tasks.
3. Click the **Time Mode** button to show all times in hours.
4. Click the **Sel All** button to select all the text in QTicket.
5. Click the **To Clipboard** button to copy the selected text into the **Windows Clipboard**.
6. Click the **Notepad** button to open Notepad.
7. When Notepad opens. Click **Edit** then click **Paste** on the Notepad Menu. Observe the QTicket text in now in Notepad. Close Notepad without saving.
8. Click the **Word** button. When Word opens. Click **Edit** then click **Paste** on the Word Menu. Observe the QTicket text in now in Word. Close Notepad without saving. You can paste into any application that recognizes the Windows Clipboard.
9. Click the **Clear** button to clear the **QTicket** textbox.



Exercise 17-1c. Using QTicket

Exercise 17-1c. Using QTicket. Open File (***Exercise P7-all Results-HECS-Data.xls)***

1. You want to know what it takes to clean all of the second floor.
2. Select all second floor records. There are several ways to select a range of records.
   a. Click in any row except row 6. Click and hold down the left mouse button in row 6 and drag through row 12 to select all second floor spaces. NOTE: because of the dropdown feature the intended first row of a range cannot be already selected when you click to begin the drag through.
   b. Another way to select a range of rows is to click in the desired first row. Then while holding down the shift key, click the desired last row.
3. Click the Get Record (s) button in QTicket. Scroll up and down in **QTicket**. Observe all seven second floor spaces and the summary calculations at the bottom.
4. You may also select non-adjacent records.
5. You can also get records one at time.

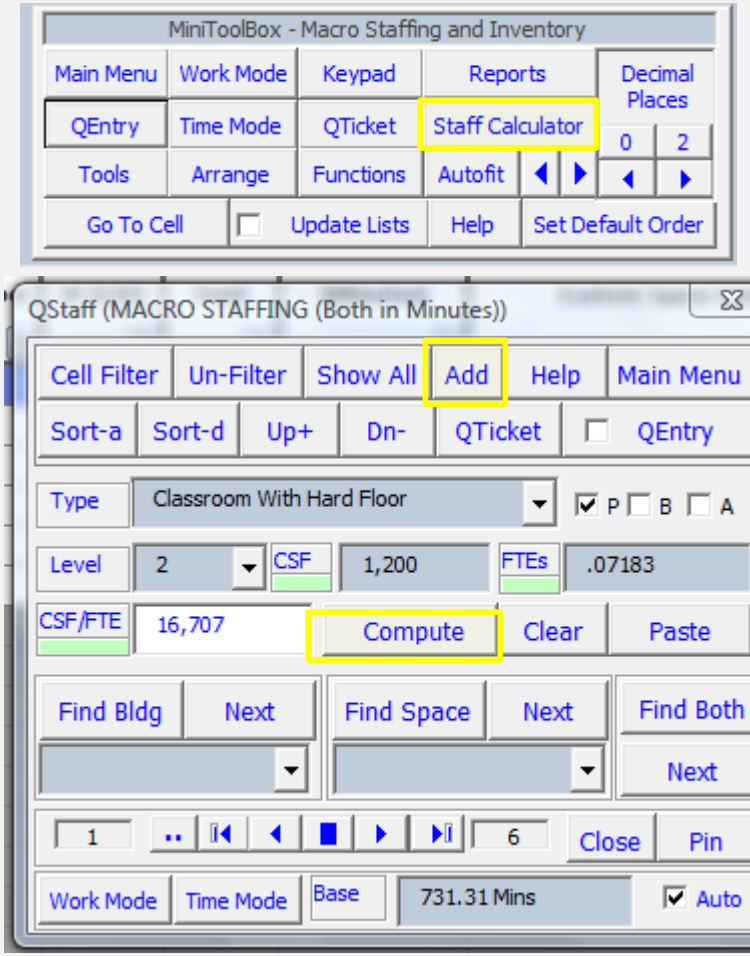


Procedure 17. Exploring Staff Calculator (QStaff)

Procedure 17. Staff Calculator (QStaff). Open File ***(Exercise P7-all Results-HECS-Data.xls)***

1. **QStaff**. Use this button to activate the **Staff Calculator (QStaff)** feature. This feature allows you to make quick calculations for single Standard Space Categories to determine selecting Space Type, Cleaning Level and Cleanable Square Feet.

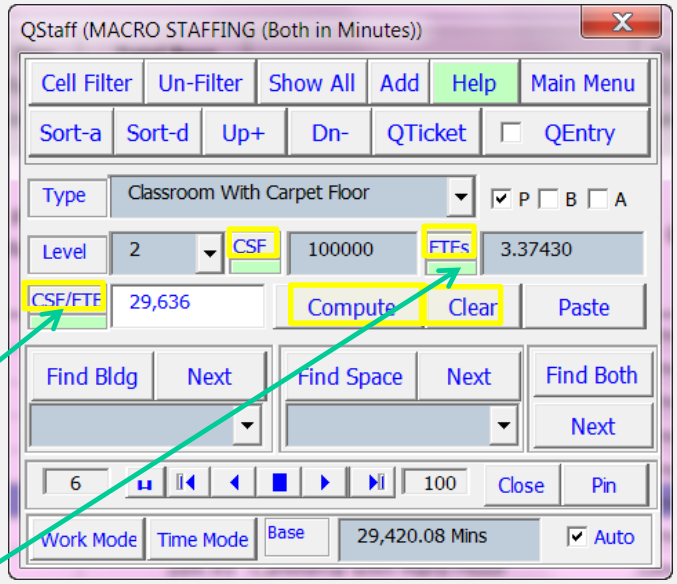
   One example of use is when you want to know how much it will take to clean a hypothetical standard or local space category when you know the CSF, space category, and desired cleaning level. On the other hand you might know the FTEs and CSF and want to compute the cleaning level. If at least one of the variables is blank you can use the **Compute** button the compute the other variables. You can also use the Add button to add the results of QStaff to QTicket.



Exercise P17-1. Staff Calculator (QStaff)

Exercise P17-1. Staff Calculator (QStaff). Open File (***Exercise P7-all Results-HECS-Data.xls***)

1. Open File ***Exercise P7-all Results-HECS-Data.xls*** if not already open.
2. You learn of a new building coming on line with 100,000 CSF of **Classroom Space With Carpet** and you want to know how it might impact your staff needs.
3. Click **Staff Calculator** button in **MiniToolbox** to activate QStaff.
4. Click the **Clear** Button.
5. In the **CSF** textbox, type 100000
6. In the **Type** dropdown list, select **Classroom Space With Carpet**



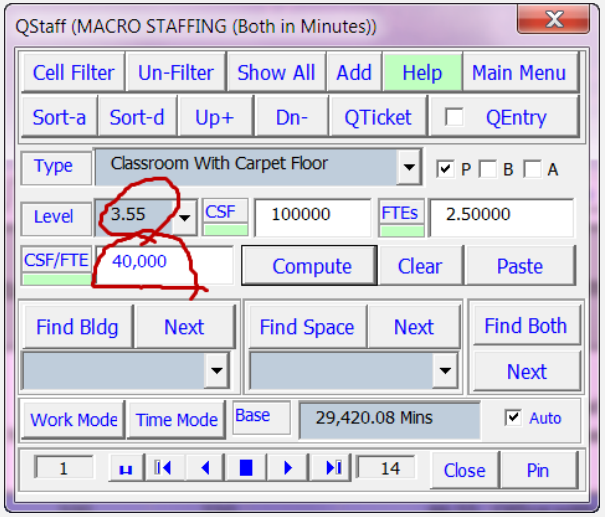
7. Observe that it will take 3.37 FTEs to clean the new space at Level 2.
8. You want to know how many FTEs it will take to clean at Level 1.
9. Click on the CSF/FTE and FTEs flat box to blank the FTEs and CSF/FTE textboxes.
10. Select 1 in the Level textbox.
11. Click the **Compute** button. Observe that it takes 7.26 FTEs to clean the new space to Level 1
12. Repeat Step 8 through 11 for Level 3 and then for level 4. Observe that it takes 3.02 FTEs to clean the space at level 3 and 2.18 FTEs to clean at Level 4.

Note: the green bars activate a Beta Calculator that is still in testing. The Enter feature is not fully tested.

Exercise P17-2. Staff Calculator (QStaff)

Exercise P17-2. Staff Calculator (QStaff). Open File (***Exercise P7-all Results-HECS-Data.xls***)

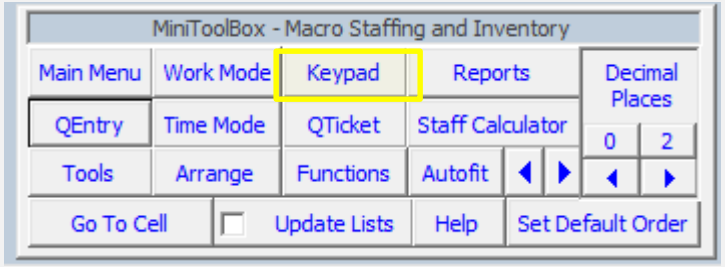
1. Your budget officer informed you that you will only get 2 full time and 1 half time new FTEs for the new space for a total of 2.5 FTEs. You want to know what cleaning level you can obtain without exceeding the standard CSF/FTE.
2. Click the flat boxes to clear FTEs and CSF/FTE and Level textboxes.
3. Type 2.5 in the FTEs textbox.2.5 FTE will achieve cleaning level 3.55 which is between 4 and 3 but closer to 4 and you will have to assign 40,000 CSF/FTE. Recall that Cleaning Level 4 require 2.18 FTEs and cleaning level 3 requires 3.02 FTEs. You can see that 2.5 FTE is closer to 2.18 (Level 4) than it is to 3.02 (Level 3).

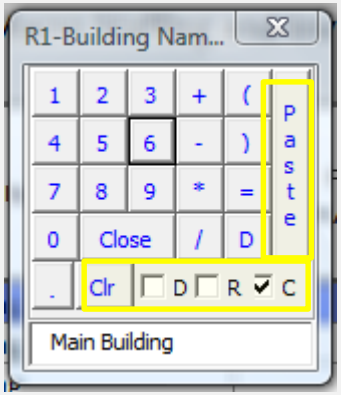


Procedure 18. Exploring KeyPad

Procedure 18. Exploring KeyPad

1. While in the Macro Staffing and Inventory worksheet, you can click on the **Keypad** button to activate the keypad feature. The keypad is used in much the same way as a calculator with a few extra features. This is handy when you have space dimensions and





- Need to compute square feet.
- Use the number and operator keys to perform calculation just as you would on a calculator.
- You may enter number and text directly into the input box
- Use the **Paste** button to paste the content of the calculator input box into the current cell or the current selected range of cells in the worksheet.
- Use the **Clr** button to clear the input box.
- Check the **Down Cycle Checkbox** ('D') checkbox to have the insertion point advance to the next row after each paste.
- Check the **Right Cycle Checkbox** ('R') checkbox to have the insertion point advance to the next column after each paste.
- Check the **Capture Input Box Checkbox** ('C') to automatically capture the selected cell into the input box when you click inside a cell in the worksheet.
- Use the **"D"** button to delete the last character of digit in the input box.
- Note the Keypad title bar indicates the selected row and the column heading. The screenshot indicate Row 1 and the Cleanable SF heading.

Exercise P18-1a. Using KeyPad to Enter Data

Exercise P18-1a. Using KeyPad to Enter Data

Seq	Building Name	Floor	Room Number	Length	Width	Room type	Cleaning Level
1	Admin Building	1	100	45	24	Classroom With Carpet Floor	Level 2
2	Admin Building	1	101	60	30	Classroom With Carpet Floor	Level 2
3	Admin Building	1	102	55	35	Classroom With Carpet Floor	Level 2
4	Admin Building	2	200	14	16	Office with Hard Floor	Level 2
5	Admin Building	2	201	20	16	Office with Hard Floor	Level 2
6	Admin Building	2	202	24	12	Office with Hard Floor	Level 2
7	Admin Building	3	300	40	50	Research Lab with Hazardous Waste	Level 2
8	Admin Building	3	301	75	30	Research Lab with Hazardous Waste	Level 2
9	Admin Building	3	302	35	65	Research Lab with Hazardous Waste	Level 2

1. You will use the keypad to enter the below data. Go to **Main Menu**. Click **Close** button. Click **Yes**. Click **Macro Staffing and Inventory** button. Click the **Keypad** button. Move the keypad to a convenient location on the screen. Uncheck all **Keypad** checkboxes.
2. In the Keypad input box, type **Admin Building.** Select Rows 1 through 9 by dragging thorough the rows. Click the **Paste** button. Observe that rows 1 through 9 now contains **Admin Building**.
3. Click **Clr** button. Click the **"1"** button. Select rows 1 through 3 under **Floor** column. Click the **Paste** button.
4. Click **Clr** button. Click the **"2"** button. Select rows 4 through 6 under **Floor** column. Click the **Paste** button.
5. Click **Clr** button. Click the **"3"** button. Select rows 7 through 9 under **Floor** column. Click the **Paste** button.

Exercise P18-1b. Using KeyPad to Enter Data

Exercise P18-1b. Using KeyPad to Enter Data (Continued from previous Exercise)

Seq	Building Name	Floor	Room Number	Length	Width	Room type	Cleaning Level
1	Admin Building	1	100	45	24	Classroom With Carpet Floor	Level 2
2	Admin Building	1	101	60	30	Classroom With Carpet Floor	Level 2
3	Admin Building	1	102	55	35	Classroom With Carpet Floor	Level 2
4	Admin Building	2	200	14	16	Office with Hard Floor	Level 2
5	Admin Building	2	201	20	16	Office with Hard Floor	Level 2
6	Admin Building	2	202	24	12	Office with Hard Floor	Level 2
7	Admin Building	3	300	40	50	Research Lab with Hazardous Waste	Level 2
8	Admin Building	3	301	75	30	Research Lab with Hazardous Waste	Level 2
9	Admin Building	3	302	35	65	Research Lab with Hazardous Waste	Level 2

1. Click **"D"** and **"C"** checkboxes to checked status. Click in row 1 of **Room Number** column.
2. Click **"100"** on the Keypad. Click **Paste** button. Repeat for 101, 102, 200, 201, 202, 300,301, 302 to finish populating the room number column. Note the insertion point advances to the next row because the Down Cycle checkbox is checked.
3. Click in row 1 under the **Cleanable SF (CSF)** column.
4. Click **"45"**. Click "*". Click **"34**. Click **Paste** button. Repeat for the remaining space dimensions. Observe that the **Paste** button performs the equal function and paste the results into the selected cell.
5. Click in row 1 under **Standard Space Category** column. Select **Classroom With Carpet Floor** from the dropdown list (you might have to scroll up in the dropdown list). Press **Enter** key.
6. Uncheck the **"D"** checkbox. Check the **"C"** checkbox. Click in row 1 under **Standard Space Category** column. Uncheck **"C"** checkbox. Select rows 2 through 3 under **Standard Space Category** column. Click the **Paste** button.

Exercise P18-1c. Using KeyPad to Enter Data

Exercise P18-1c. Using KeyPad to Enter Data (Continued from previous Exercise)

Seq	Building Name	Floor	Room Number	Length	Width	Room type	Cleaning Level
1	Admin Building	1	100	45	24	Classroom With Carpet Floor	Level 2
2	Admin Building	1	101	60	30	Classroom With Carpet Floor	Level 2
3	Admin Building	1	102	55	35	Classroom With Carpet Floor	Level 2
4	Admin Building	2	200	14	16	Office with Hard Floor	Level 2
5	Admin Building	2	201	20	16	Office with Hard Floor	Level 2
6	Admin Building	2	202	24	12	Office with Hard Floor	Level 2
7	Admin Building	3	300	40	50	Research Lab with Hazardous Waste	Level 2
8	Admin Building	3	301	75	30	Research Lab with Hazardous Waste	Level 2
9	Admin Building	3	302	35	65	Research Lab with Hazardous Waste	Level 2

1. Click in row 4 under **Standard Space Category** column. Select **Office With Hard Floor** from the dropdown list (you might have to scroll up in the dropdown list). Press **Enter** key.
2. Uncheck the **"D"** checkbox. Check the **"C"** checkbox. Click in row 4 under **Standard Space Category** column. Uncheck **"C"** checkbox. Select rows 5 through 6 under **Standard Space Category** column. Click the **Paste** button.
3. Click in row 7 under **Standard Space Category** column. Select **Research Lab with Hazardous Waste** from the dropdown list (you might have to scroll up in the dropdown list). Press **Enter** key.
4. Uncheck the **"D"** checkbox. Check the **"C"** checkbox. Click in row 7 under **Standard Space Category** column. Uncheck **"C"** checkbox. Select rows 8 through 9 under **Standard Space Category** column. Click the **Paste** button.
5. Click in row 1 under **Cleaning Level** column. Select **Level 2**from the dropdown. Press **Enter** key.
6. Uncheck the **"D"** checkbox. Check the **"C"** checkbox. Click in row 1 under **Cleaning Level** column. Uncheck **"C"** checkbox. Select rows 1 through 9 under **Cleaning Level** column. Click the **Paste** button.

Exercise P18-1d. Using KeyPad to Enter Data

Exercise P18-1c. Using KeyPad to Enter Data (Continued from previous Exercise). Open File ***Exercise P18 Results-HECS-Data.xls.***

	Macro Staffing and Inventory Data			9 Spaces 12,162 Total CSF	Flex Field (count)	Total Base Time (Minutes) = 3,969.34	MACRO STAFFING (Both in Minutes)	SWA Level = 2.00/TWA Level = 2.00	Avg. CSF/FTE = 12,445	Minutes To Clean = 410.44	Total FTEs = .98	9 Spaces
Row	Building Name/Number	Floor Name/Number	Space Name/Number	Cleanable SF (CSF)	Flex Field	Base Time (Minutes)	Standard Space Category Or Local Custom Space Category	APPA Cleaning Level	CSF Per FTE	Mins per day (Both)	FTEs (Both)	Default Row Seq
1	Admin Building	1	100	1,080		317.74	Classroom With Carpet Floor	Level 2	**29,636**	**15.31**	**0.036**	1
2	Admin Building	1	101	1,800		529.56	Classroom With Carpet Floor	Level 2	**29,636**	**25.51**	**0.061**	2
3	Admin Building	1	102	1,925		566.34	Classroom With Carpet Floor	Level 2	**29,636**	**27.28**	**0.065**	3
4	Admin Building	2	200	224		99.08	Office with Hard Floor	Level 2	**16,838**	**5.59**	**0.013**	4
5	Admin Building	2	201	320		141.54	Office with Hard Floor	Level 2	**16,838**	**7.98**	**0.019**	5
6	Admin Building	2	202	288		127.38	Office with Hard Floor	Level 2	**16,838**	**7.18**	**0.017**	6
7	Admin Building	3	300	2,000		670.56	Research Lab with Hazardous Waste	Level 2	**8,522**	**98.57**	**0.235**	7
8	Admin Building	3	301	2,250		754.38	Research Lab with Hazardous Waste	Level 2	**8,522**	**110.89**	**0.264**	8
9	Admin Building	3	302	2,275		762.76	Research Lab with Hazardous Waste	Level 2	**8,522**	**112.13**	**0.267**	9

1. The above screenshot is the results of the data you entered. As can be seen 0.98 FTEs are required to clean the 9 spaces at Level 2.
2. What if you want to see how many FTEs it will take to clean at Level 1, 3, 4 and 5. You can use the Keypad to change all the levels to Level 2.
    a. In the keypad input box type **Level 1.** Select rows 1 through 9. Click the **Paste** button. Observe that it will take 1.48 FTEs to clean to Level 1.
    b. Repeat Step 2a above for Levels 3, 4 and 5 and observe the below results.

Level 1	Level 2	Level 3	Level 4	Level 5
1.48 FTEs	0.98 FTEs	0.82 FTEs	0.57 FTEs	0.29 FTEs

APPA Guidelines Third Edition Examples

You will need the ***APPA Custodial Operational Guidelines: Custodial Third Edition*** and the full feature version of *CleanOpsStaff-3ed* for some of the following exercises.

To activate the full features you must purchase a Product Code from the APPA bookstore[xxx] and request an Activation Key from *Hunter Consulting and Training*.

Exercise APPA Page 11,Figure 1.1: Staffing Service Levels

1. Starting from the **Main Menu,** click **Staffing Service Levels** button.

   Observation1: Compare the *CleanOpsStaff-3ed* **Staffing Service Level** table with APPA Guidelines Page 11, Figure **1.1** and note that the numbers differ slightly because they are rounded in the Guidelines and are not rounded in *CleanOpsStaff-3ed* to avoid compounding rounding errors in the many calculations performed by *CleanOpsStaff-3ed*. **Note that in the Guidelines book, the matrices are sorted in alpha order and the matrix numbers from the old second edition have been dropped. In** *CleanOpsStaff-3ed*, the matrices remains listed in the same order as they are in the second edition – this is done to reduce re-programming time and to provide easy reference back to the second edition if desired.

   Observation2: *CleanOpsStaff-3ed* adds three extra columns to the table.

   a. Level C2 – this cleaning level is added to allow you to customize a level within the 33 APPA **Standard Space Categories** and to allow you to assign a level to the 15 **Local Space Categories (40 with ProLocal Upgrade).**

   b. **Routine Minutes To Clean** and **Projects Minutes To Clean** – ***CleanOpsStaff-3ed*** brings this number over from the 33 Standard Matrices and the 40 Local Categories so you can readily see how long it would take to perform the cleaning activities included in the two types of work (Routine & Project).

   Observation3: ***CleanOpsStaff-3ed*** uses the Cleanable Square Feet per FTE data from this table in its basic calculations. It also uses the Minute to Clean data. Note that it takes 28.75 minutes to do the Routine tasks and 482.63 minutes to do the Projects tasks for **Classroom with Hard Floor**.

2. In the MiniToolbox, click the **Time Mode** button. Observe the times change to hours and the headings change color. Click the **Time Mode** again to switch back to minutes

3. Click **Main Menu Button** to return to the main menu.

Exercise APPA Appendix B, Pages 251-317: Standard Space Category Matrices

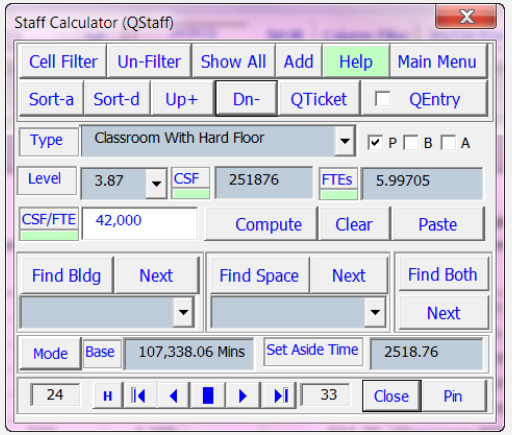
1. Starting from the **Main Menu,** click **Standard Space Category** button**.**
2. A **Standard Space Category Navigator** will appear on the right side of the screen with the matrices list in Alpha order the first time you launch the Standard Category Navigator.
3. Click the category name in the list to navigate from matrix to matrix. Compare the information in the screen to the information in the guidelines book. **The numbers in CleanOpsStaff-3ed will differ slightly from the numbers in the book due to rounding.**
4. Drag the mouse through the list as another method to go from matrix to matrix.
5. Observe the same numbers and frequencies for the activities and levels as in the APPA Guidelines matrix.
6. Observe the **Level C2** column added by CleanOpsStaff-3ed which you can modify.
7. Observe the ***MiniToolbox***. This tool box will make it easy for you to customize a cleaning level C2 to fit your local conditions.

   Note1: You will learn to use the feature of the Standard Category ***MiniToolbox*** in a different section of this document.
8. Click the ***Num*** button on the **Standard Space Category Navigator** to sort the list of matrices by matrix number as they appeared in the old CleanOpsStaff and the old APPA Guidelines Second Edition
9. Click the ***Name*** button to sort the list of matrices alphabetically
10. Click Main Menu either on the ***Standard Space Navigator*** or on the ***MiniToolbox*** to return to the main menu.

Exercise APPA Example 1, Page 10 FTEs and Cleaning Level for 251,876 CSF of Classroom Space

From APPA Book: Your campus has 251,876 square feet of space assigned to classrooms with hard floors, and six custodians to clean that space. Identify your current theoretical cleaning level on Figure 1.1 and calculate the number of custodians required to clean at Level 2.

1. While in the Inventory and Staffing worksheet, click ***Staff Calculator*** button in the MiniToolBox to activate the ***Staff Calculator***.
2. Use the ***Type*** dropdown list to select ***Classroom with Hard Floor***. Observe that the calculator calculates information for cleaning level 2 and 1,200 CSF (base time for the matrix)
3. Click the ***Clear*** button



1. Enter **251,876 in the *CSF* input box.** Type **OK** if prompted
2. Enter **6 in the *FTEs*** input box
3. Click the ***Compute*** button
4. Observe result -- the cleaning level with only 6 FTEs is 3.87 or between ***Level 4*** and ***Level 3*** but closer to ***Level 4***. The CSF/FTE is **42,000** (round)
5. Select '**3**' from the ***Level*** dropdown list and observe CSF/FTE = **32,000** and FTE = 7.88
6. Select '**4**' from the ***Level*** dropdown list and observe CSF/FTE = **43,400** and FTE = 5.79
7. Finally observe that 6 FTEs is between 5.79 FTEs and 7.88 FTEs but closer to 5.79 FTE

Exercise APPA Example 1, Page 10 FTEs and Cleaning Level for 251,876 CSF of Classroom Space (Cont'd)

From APPA Book: Your campus has 251,876 square feet of space assigned to classrooms with hard floors, and six custodians to clean that space. Identify your current theoretical cleaning level on Figure 1.1 and calculate the number of custodians required to clean at Level 2.

1. You can also use the inventory worksheet to answer this question
2. From the Main Menu, click the ***Macro Staffing and Inventory*** button
3. In the first blank row, click under the Building Name/Number column and enter ***Test Bldg***. Hit ***Tab key***. Enter ***Test Floor***. Hit ***Tab Key***. Enter ***Test Room***. Hit ***Tab Key***. Enter ***251876***
4. Hit ***Tab key*** twice. Select ***Classroom With Hard Floor*** from dropdown list. Hit ***Tab key***
5. Select ***Level 1*** from the dropdown list. Observe that it take 24.61 FTEs to clean at Level 1.
6. Select ***Level 2*** from the dropdown list. Observe that it take 13.16 FTEs to clean at Level 2.
7. Select ***Level 3*** from the dropdown list. Observe that it take 7.88 FTEs to clean at Level 3.
8. Select ***Level 4*** from the dropdown list. Observe that it take 5.78 FTEs to clean at Level 4.
9. You can see that 6 FTEs is between 5.78 and 7.88 and closer to 5.78. Therefore, your 6 FTEs can be expected to clean between Level 3 and Level 4 closer to Level 4.

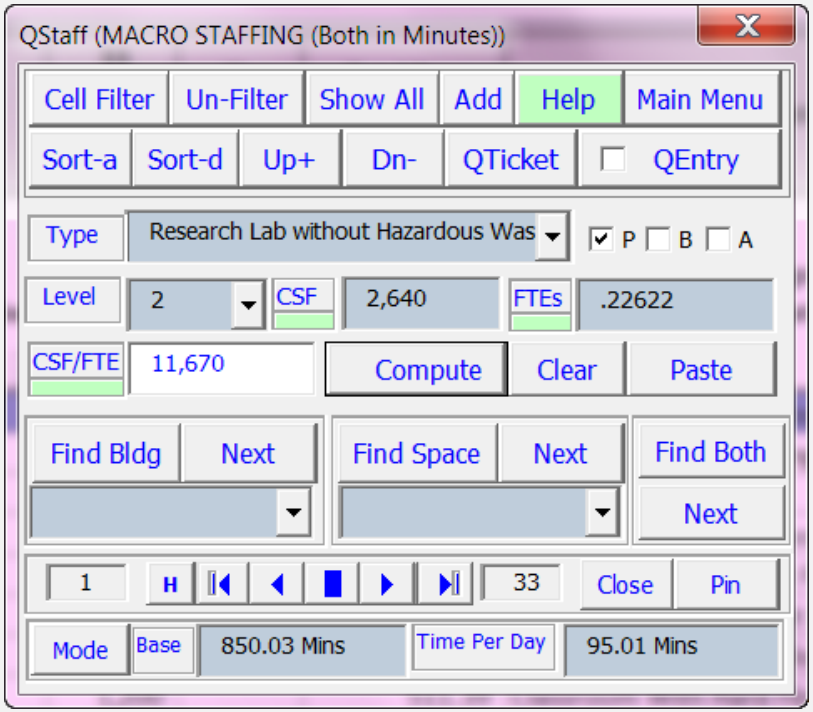
1. You can also use the reports feature to answer this question
2. Click inside the worksheet to select the row for you Test Room
3. Click ***Reports*** button in the ***MiniToolBox***. Click the ***Macro Staff by Level*** button
4. Observe the FTE numbers above the ***No of Cust*** headings for the six cleaning levels and again you can see 6 FTEs falls between Level 3 and Level 4
5. Click the ***Cost of Cleaning by Levels*** button. Observe under the FTE column that 6 FTEs falls between Level 3 and Level 4

Exercise APPA Example 2, Page 12: Time to clean 2,640 CSF Chemistry Lab at Level 2

From APPA Book: You have a 2,640 CSF room which is designated as a chemistry lab. How long should it take to clean that space at Level 2?

- Assume the space can be treated like a Research Lab without Hazardous Waste, with a 11,700 CSF per custodian assignment at Level 2. 2,640 CSF divided by 11,700 CSF per custodian = 0.226 FTE. Since the summary is based on 420 minutes per shift, it will take 0.226 x 420 = 94.92 minutes to clean that space.

1. While in the Inventory and Staffing worksheet, click ***Staff Calculator*** button in the MiniToolBox to activate the ***Staff Calculator***.
2. In ***Staff Calculator,*** select ***Research Lab without Hazardous Waste***. Observe information computed for Level and 324 CSF at .027 FTE, 11,670 CSF/FTE, 104.32 Base Time, and 11.66 Minutes per day
3. In ***Staff Calculator,*** Click ***Clear*** button
4. Enter 2,640 in the ***CSF*** input box
5. Click ***Compute*** button. Observe .22622 FTE, and **95.01** Minutes per Day.. The 95.01 is computed as .22622 x 420 productive minutes per day. The difference between 95.01 and the 94.92 in the book is due to rounding (.226 x 420 = 94.92).
6. Another approach, is to simply enter the information in the inventory worksheet



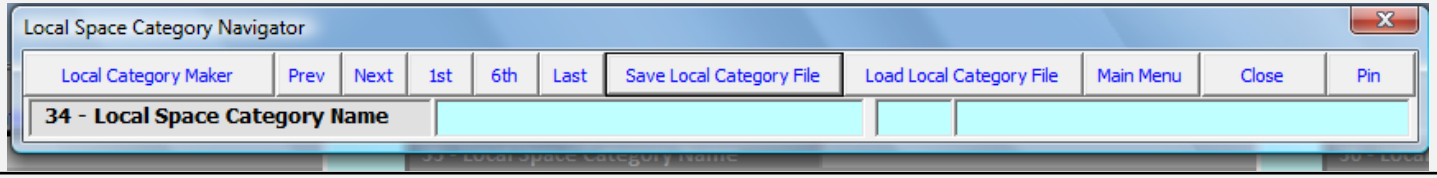
Exercise APPA Example 1, Page 17, Figure 2.2 – New Classroom with Hard Floor Matrix, Routine Activities

From APPA Book: You are "resource leveled," clean your hard floor classrooms with activities at the frequencies given for Level 2, but do not re-lamp or empty pencil sharpeners. You do dust blinds weekly. Assuming you get 7 productive hours of work, how many CSF of classrooms con you assign your staff per shift?

- By being "resource leveled," only the upper portion of the matrix is needed to identify cleanable square feet assigned per custodian for routine work activities. We recommend creating new matrices any time you solve these types of problems. Since you are only concerned with a specific frequency of cleaning for each task, only one column of adjusted minutes is needed to get the appropriate answer. The new "matrix" will look like Figure 2.2.

Explanation: You will make a local category to account for the difference in tasks and frequencies you desire for this space compared to the tasks and frequencies in the standard matrix.

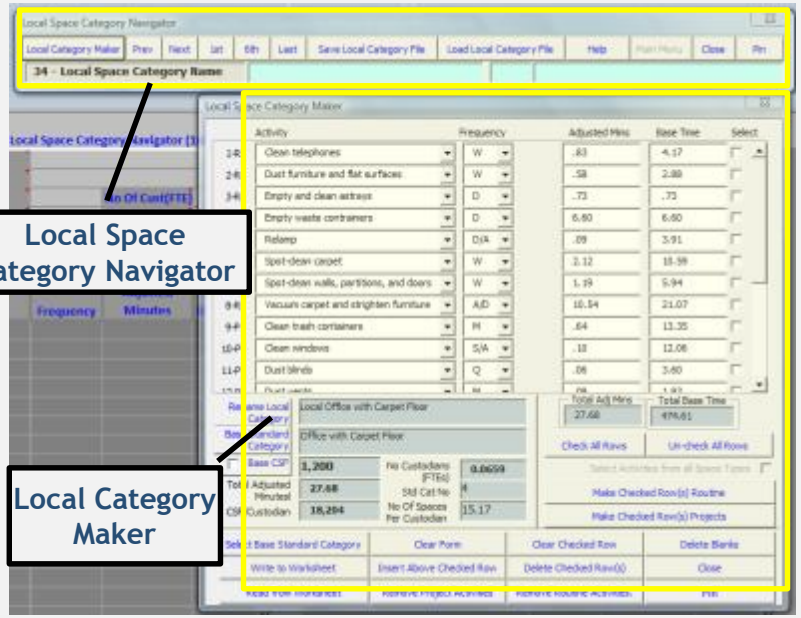
1. From the ***Main Menu,*** click ***Open*** button. Select file ***APPA Barton Hall Base Data P-17 Fig-2.2 and 2.3-HECS-Data.xls*** and click ***OK.*** Click ***Yes.*** Click ***Ok.***
2. Click ***Macro Staffing and Inventory*** button. Observe there are already two rows in the inventory data worksheet – these two rows are for reference only.
3. Click ***Main Menu.*** Click ***Local Space Categories Button*** to get to the ***Local Space Categories Worksheet.*** There are 15 matrices, numbered 34-48 (40 matrices, numbered 34-73 with ***ProLocal Upgrade***) taking up from where the 33rd Standard Matrices left off. The matrix at the far left of the screen with the blue text heading is the ***Active Local Matrix.*** You Navigate through the matrices using the ***Local Space Category Navigator*** or by clicking inside of the matrix you want to become the ***Active Local Matrix***.



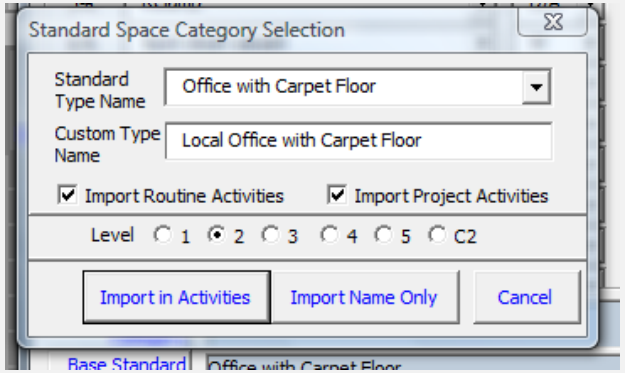
3. Click ***1st*** button to make the first **Local Space Category Matrix** active. Click the ***Next*** **Button**, then ***Prev*** button, **Mid** button and the **Last** button as often as necessary for you to get a feel for what they do. Click the ***List*** button to go directly to a matrix.

Exercise APPA Example 1, Page 17, Figure 2.2 – New Classroom with Hard Floor Matrix, Routine Activities (Cont'd)

4. You will use the ***Local Category Maker button*** to make your Local Category. Click ***Local Category Maker*** button to open It (it work similar to a Microsoft wizard).
5. Click ***1st*** button on the **Local Space Category Navigator** to make sure you are working with the first matrix.
6. In the lower left corner of the ***Local Category Maker***, click ***Select Base Standard Category***. This will be the standard category you will base your local category on. Refer to the Guidelines narrative on page 17.
7. In the ***Standard Type Name Box*** of the ***Standard Space Category Selection Dialog Box***, select ***Classroom Room with Hard Floors*** from the drop down list.



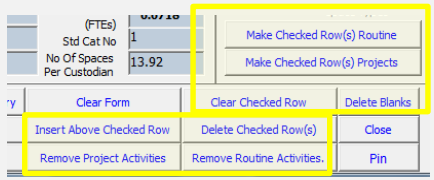
8. Observe the that the ***Standard Space Category Selection Dialog Box*** looks like the screenshot to the right. Observe that ***CleanOpsStaff-3ed*** named your local category by putting the word ***Local*** in front of the standard name. You will be able to rename the local category with the ***Rename Local Category*** button later if need be. If you do rename the local matrix we recommend you keep the word 'Local' or '[LM]' as the first part of the name. For now, accept the defaults and click the ***Import Activities*** button.
9. **Note**: This Example continues on next page .



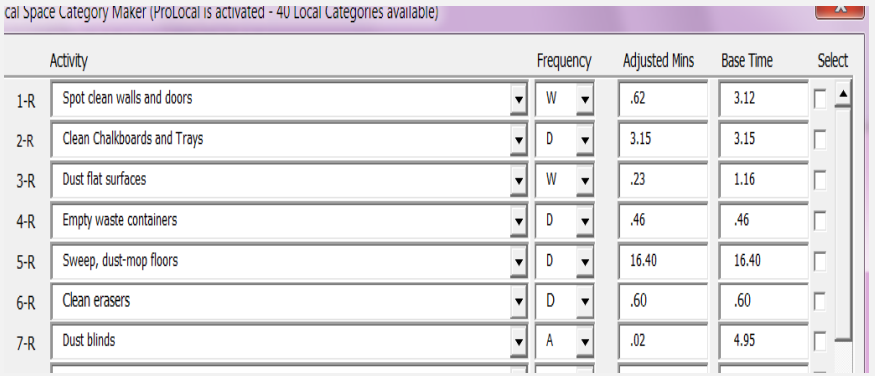
Exercise APPA Example 1, Page 17, Figure 2.2 – New Classroom with Hard Floor Matrix, Routine Activities (Cont'd)

10. Observe that all eighteen (18) cleaning activities were imported into the ***Local Category Maker*** from the standard matrix. Observe the 'R' and 'P' next to the L***ocal Category Maker*** row number to denote whether the activity is a **Routine Activity** or **Project Activity.** Use the **Scroll Bar** on the right of L***ocal Category Maker*** to scroll through the activities.
11. You will keep only seven (7) of the activities and convert the ***Dust Blinds Activity*** from a ***Project Activity to a Routine Activity***.
12. Find the ***Dust Blinds Activity*** and check its checkbox at the far right of the row. Click ***Make Selected Row(s) Routine*** button. Observe that the **Dust Blinds Activity** now has an ***'R'*** in it row number instead of a 'P'. Click **the *Un-Check All Rows*** button**.**

14. Using the buttons indicated in the screenshot to the right, there are many different approaches you can take to get the **Activities List** down to just the seven you want.
15. Since you converted **Dust Blinds Activity** to a **Routine Activity**, you will remove all the **Project Activities**.



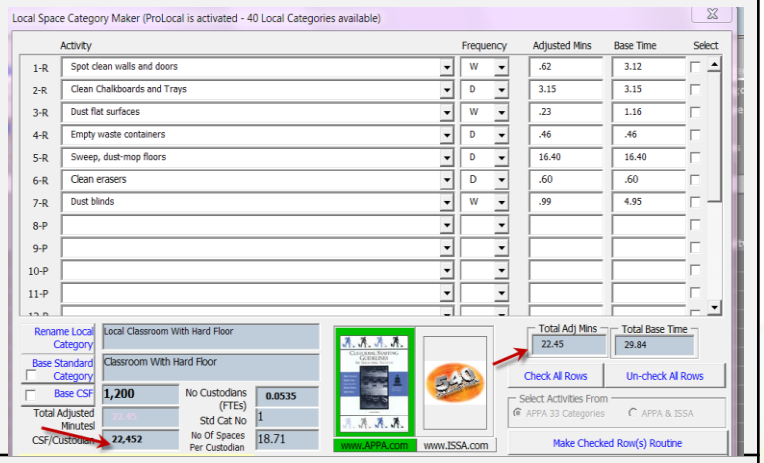
16. You want to end up with your Activities List looking like the screenshot to the right.
17. Click *the* ***Remove Project Activities Button.*** Observe that you are now left with nine (9) ***Routine Activities.***
18. Click the checkbox for ***Relamp*** in row 2-R and for ***Empty pencil sharpeners*** in row 6-R.



19. Click ***Delete Checked Row(s) Button.*** Observe that the two unwanted activities were deleted.
20. **Note**: This Example continues on next page .

Exercise APPA Example 1, Page 17, Figure 2.2 – New Classroom with Hard Floor Matrix, Routine Activities (Cont'd)

21. For Dust Blinds, use the dropdown list to change the frequency to weekly by selecting ***W***. Compare the results the screenshot and to Figure 2.2 on page 18.
22. You are now ready to write the Local Category to the **Local Category Worksheet**. Click **Write to Worksheet** button. Click **Yes.**
23. In Local Space Category Maker, click **Close** button. Click **Yes.** Observe the **Local Category** now in the worksheet and will be available for you to select from within the **Data and Inventory Worksheet.** It will also be reflected in the Staffing Services Levels table along with the 33 Standard Space Categories.
24. Close the ***Local Category Maker***
25. Click ***Main Menu*** either on the ***Local Space Category Navigator*** or on the ***MiniToolbox***.
26. Click ***Macro Staffing and Inventory*** button. You will now make use of your newly created Local Space Category.
26. Enter data for a **1200** CSF classroom on the first floor, with a Space Number of **103,** with a Category ***of Local Classroom With Hard Floor***. Compare the results with the Guidelines Figure 2.2, page 18.



Click here to select and activate Local Space Category Navigator (1st/34)

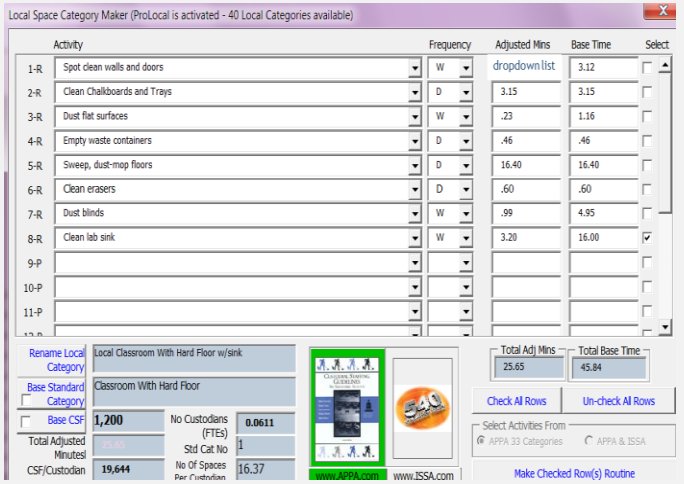
34 - Local Space Category Name	Local Classroom With Hard Floor			
Based on Standard type	Classroom With Hard Floor			
Base CSF	1,200.	No Of Cust(FTE)	.05	
Total Adjusted Minutes	22.45	Std Type No	1.	
CSF/Custodian	22,452.	Spaces/Cust	18.71	

	Activity	Frequency	Adjusted Minutes (22.45)	Base Time (29.84)	
1-R	Spot clean walls and doors	W	.62	3.12	1
2-R	Clean Chalkboards and Trays	D	3.15	3.15	2
3-R	Dust flat surfaces	W	.23	1.16	3
4-R	Empty waste containers	D	.46	.46	4
5-R	Sweep, dust-mop floors	D	16.4	16.4	5
6-R	Clean erasers	D	.6	.6	6
7-R	Dust blinds	W	.99	4.95	7
8-P					8

Row	Building Name/Number	Floor Name/Number	Space Name/Number	Cleanable SF (CSF)	Flex Field	Base Time (Minutes)	Standard Space Category Or Local Custom Space Category	APPA Cleaning Level	CSF Per FTE	Mins per day (Both)	FTEs (Both)
1	Barton Hall	1	101A	150		63.92	Classroom With Hard Floor	Level 2	**19,132**	**3.29**	**0.008**
2	Barton Hall	1	102	1,200		511.39	Classroom With Hard Floor	Level 2	**19,132**	**26.34**	**0.063**
3	Barton Hall	1	103	1,200		29.84	Local Classroom With Hard Floor	Level 2	**22,452**	**22.45**	**0.053**

Exercise APPA Example 2, Page 18: New Classroom with Hard Floor Matrix, Routine Activities for Example 1

1. **See narrative on Guidelines Example 2, APPA book page 18.**
2. From **Main Menu,** click ***Local Space Categories*** button
3. On ***Local Space Category Navigator*** Click 1st button
4. Click the ***Local Space Maker*** button
5. Click ***Read from Worksheet*** button and **Yes.** Observe that the first local category information has been read into the ***Local Space Maker***
6. Click ***Next*** button to make second local category matrix active
7. In row 8-P, click the dropdown arrow and scroll down dropdown list ***to 6-Research Lab with Hazardous Waste*** *and select* ***Clean Sink*** and click
8. From the ***Frequency*** dropdown list select **'W' for** weekly
9. Under ***Select*** column for '***Clean Sink***' check the **Checkbox**
10. Click **the Make Check Row (s) Routine** button
11. Click ***Un-check All Rows*** button
12. Click ***Rename Local Category*** and change Category name **to 'Local Classroom With Hard Floor w/sink'**
13. Click ***Write to Worksheet*** button and click ***Yes***
14. Compare CleanOpsStaff-3ed results with Figure 2.3, APPA book page 19.
15. Open file ***APPA Barton Hall Base Data P-17 and P-18 Examples 1 and 2 Solution-HECS-Data.xls*** to see text book solution to the previous Examples 1 and 3 APPA book page 17/18



Click here to select and activate Local Space Category Navigator (2nd/35)

35 - Local Space Category Name	Local Classroom With Hard Floor w/sink			
Based on Standard type	Classroom With Hard Floor			
Base CSF	1,200.	No Of Cust(FTE)	.06	
Total Adjusted Minutes	25.65	Std Type No	1.	
CSF/Custodian	19,644.	Spaces/Cust	16.37	

	Activity	Exclude	Adjusted Minutes (25.65)	Base Time (45.84)
1-R	Spot clean walls and doors	W	.62	3.12
2-R	Clean Chalkboards and Trays	D	3.15	3.15
3-R	Dust flat surfaces	W	.23	1.16
4-R	Empty waste containers	D	.46	.46
5-R	Sweep, dust-mop floors	D	16.4	16.4
6-R	Clean erasers	D	.6	.6
7-R	Dust blinds	W	.99	4.95
8-R	Clean lab sink	W	3.2	16.

Exercise APPA Example 3, Page 19: 15-Minute Extra Break

From APPA Book: The budget officer in the institution above, while negotiating with the union, asks you the effect of offering an additional 15-minute break as a "no-cost" contract sweetener. Your shifts currently have seven productive hours, and 20 workers clean 459,260 CSF of Hard Floor Classrooms at Cleaning Level 2 (22,963 CSF per custodian). In this example, we will use only classroom data, but in actuality you would change the productive minutes in all space categories you are using and perform the staffing calculation.

1. From ***Main Menu,*** click ***Close*** button and click ***Yes***
2. Click the ***Macro Staffing and Inventory*** button
3. In Row 1 under ***Building Name/Number*** enter '***All Buildings'***
4. Under floor Name/Number enter '***All Floors'***
5. Under Space ***Name/Number*** enter 'All ***Classroom-Hard'***
6. Under ***CSF*** enter ***459,260***
7. Under ***Standard Space Category Or Local Custom Space Category*** select ***Classroom with Hard Floor***
8. Under ***Cleaning Level*** select ***Level 2***
9. Click the ***Work Mode*** button in the ***MiniToolBox*** to display Routine work only
10. Observe 20 FTEs required to perform routine work at level 2
11. Right-click inside any cell in the Inventory worksheet and select **Configuration**
12. Use the ***Resize buttons*** as needed
13. In the ***Local Number of Minutes in Day*** input box, enter 405 (this is 420 minutes minus 15 minutes)
14. Click ***Write Configuration Variable from Form To Memory*** button
15. Click the **Local** radio button
16. Observe the ***20 FTEs*** now becomes ***20.74 FTEs***

- Therefore, the conclusion is that it will take an additional 0.74 FTEs to allow for an extra 15 break while still performing the same level of service.

Note: This exercise continues on the next page

Exercise APPA Example 3, Page 19: 15-Minute Extra Break (Cont'd)

- **From APPA Book:** To make up for the lost adjusted minutes (21.95-21.16) = 0.79, instead of hiring an additional 0.74 FTE, you could offer to cut service from daily to alternate days on ***waste containers*** (0.5 x 0.46) = 0.23, ***pencil sharpeners*** (0.5 x 0.4) = 0.2, and ***erasers*** (0.5 x 0.60) = 0.30. This gives a reduction of (0.23 + 0.2 + 0.3) = 0.73 adjusted minutes, slightly less than what is theoretically needed but probably reasonably adequate.
- You will create a custom cleaning level (C2) to implement these reduction in service

1. Observe that the worksheet still shows a requirement for **20.74 FTEs**
2. *Click* **Main Menu**
3. Click ***Standard Space Category Matrices*** button
4. Select ***Classroom-Hard Floor***
5. Under the ***Level C2*** column, from the dropdown list, select '***A/D***' for ***waste containers***; ***pencil sharpeners***; *and* ***erasers*** as shown in the screenshot to the right
6. *Click* **Main Menu**
7. Click ***Macro Staffing and Inventory*** button
8. Change the APPA Cleaning Level from Level 2 to Level C2 in the worksheet
9. Observe that the worksheet now shows a requirement for **20.05 FTEs**

This demonstrates that you can provide the extra 15 minute break without hiring additional custodian, but instead by reducing the frequency certain tasks.

1 - Classroom With Hard Floor-Matrix Routine Activities	Level 1	Level 2	Level 3	Level 4	Level 5	Level C2
	D	W	M	S/A		W
Spot clean walls and doors	3.12	0.62	0.15	0.02	0.00	0.62
	D/A	D/A	D/A	D/A	D/A	D/A
Relamp	0.08	0.08	0.08	0.08	0.08	0.08
	D	D	D	A/D	A/D	D
Clean Chalkboards and Trays	3.15	3.15	3.15	1.58	1.58	3.15
	D	W	W	M		W
Dust flat surfaces	1.16	0.23	0.23	0.06	0.00	0.23
	D	D	D	A/D	A/D	A/D
Empty waste containers	0.46	0.46	0.46	0.23	0.23	0.23
	D	D	D	A/D		A/D
Empty pencil sharpeners	0.40	0.40	0.40	0.20	0.00	0.20
	D	D	A/D	A/D	A/D	D
Sweep, dust-mop floors	16.40	16.40	8.20	8.20	8.20	16.40
	D	D	D	A/D	A/D	A/D
Clean erasers	0.60	0.60	0.60	0.30	0.30	0.30
Adjusted Minutes subtotal	25.37	21.95	13.27	10.67	10.39	21.22
CSF/Custodian	19,156	22,143	36,614	45,563	46,793	22,907

Open file ***APPA Barton Hall Base Data P-19 Examples 3 Solution-HECS-Data.xls*** for text book solution to this exercise

Exercise APPA Example 4, Page 20: Summer Project Strip and Refinish the Floor

From APPA Book: You are setting up a summer project schedule and have groups of classrooms totaling 3,645 CSF in which you want to strip and refinish the floors. How much time must be set aside for a worker to do this?

- Referring to Figure 2.1, 166.6 minutes are required for 1,200 CSF (base time). (3,645/1,200) x (166.6) = 506 minutes or 8.4 hours. Two workers may be able to do the job in 4.2 hours.

1. From Main Menu, click the ***Close*** button and then click the ***Macro Staffing and Inventory*** button
2. Click the ***Work Mode*** and ***Time Mode*** buttons in the MiniToolBox if necessary to put the worksheet in ***MACRO STAFFING (Both in Minutes)*** mode (all cells in the top summary row are gray)
3. In the next blank row in the Inventory Worksheet under ***Building Name*** enter '***Summer Project Buildings'***, Under ***Floor Name*** enter '***Summer Project Floors'***, under ***Space Name*** enter ***'Summer Project Classrooms'***. Use the ***Autofit*** and ***Column Width Arrows*** in the ***MiniToolBox*** to increase column width
4. Under ***CSF*** enter ***3,645***
5. Under Category select ***Classroom with Hard Floor***
6. *Under Cleaning Level select* ***Level 2 and*** Observe the calculations for the row
7. Click anywhere inside the summer project row
8. Click the **Reports** button on the ***MiniToolBox***
9. Click the ***Time to Clean Report*** button on the ***Report Generation*** toolbox
10. Scroll over to the right to the Project section of the report and observe that it will require **506 minutes** or **8.44 hours** to strip and refinish the floors
11. Open ***APPA Barton Hall Base Data P-20 Examples 4 Solution-HECS-Data.xls*** to see the text book solution

CSF per Custodian for Project work = 1,044

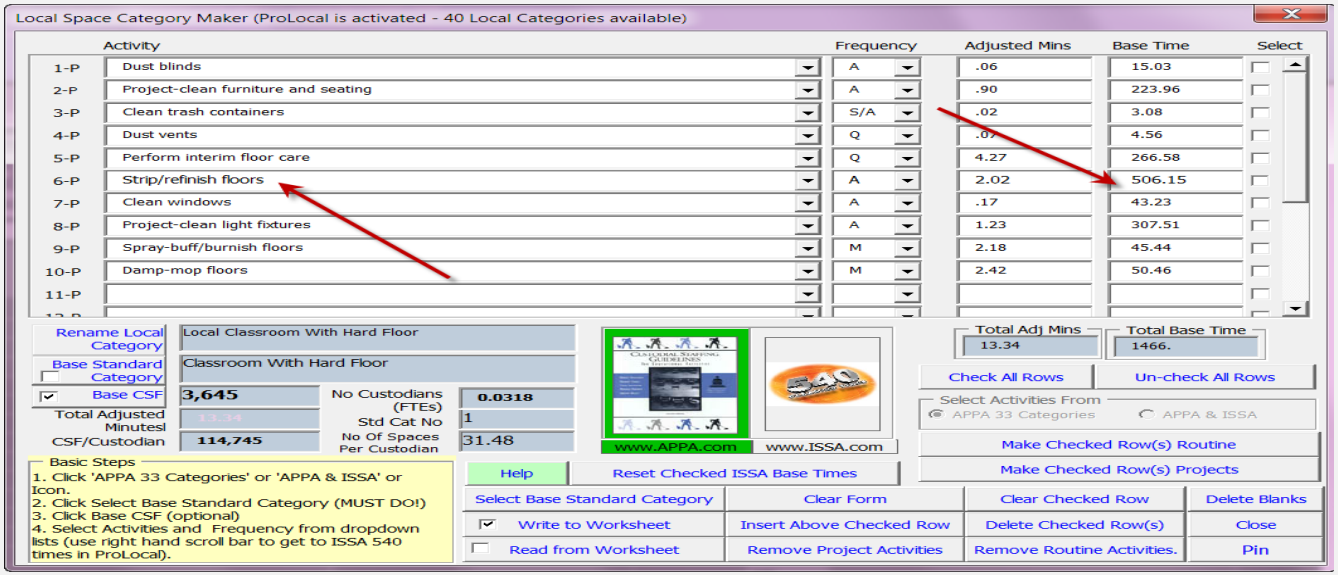
CSF per Custodian for All work = 986

Dust blinds	Project-clean furniture and seating	Clean trash containers	Dust vents	Perform interim floor care	Strip/refinish floors	Clean Windows	Project-clean light fixtures	Spray-buff/burnish floors	Damp-mop floors	Project Subtotal
15.03	223.96	3.08	4.56	266.58	506.15	43.23	307.51	45.44	50.46	1,466.00
0.25	3.73	0.05	0.08	4.44	8.44	0.72	5.13	0.76	0.84	24.44
15.03	223.96	3.08	4.56	266.58	506.15	43.23	307.51	45.44	50.46	1,466.00

Exercise APPA Example 4, Page 20: Summer Project Strip and Refinish the Floor (Cont'd)

Using the Local Space Category Maker to Answer Example 4 Question

1. By now you see that there are usually more than one method to answer staffing question. You can use the Local Category Maker to answer many staffing questions. Let's use it to answer Example 4
2. From Main Menu click ***Local Space Category*** button. Click the ***Local Category Maker*** button
3. Click the ***Base CSF*** button and enter **3,645** and click ***OK***
4. Click ***Base CSF Checkbox*** to lock the base **3,645** CSF to you entered. This prevents the ***Maker*** from switching the form to the standard Base CSF when you select a ***Base Standard Category***
5. Click ***Base Standard Category*** button
6. From the ***Standard Type Name*** dropdown list, select ***Classroom with Hard Floor***
7. Click ***Import Activities*** button
8. Click the ***Remove Routine Activities*** button to remove all routine activities
9. Locate ***Strip/refinish floors*** in the Local Space Maker and observe that the base time for ***Strip/refinish floors*** for ***3,645 CSF*** of floor is 506.15 minute as noted on APPA book page 20



Exercise APPA Example 1, Page 38: FTE to Service 7,851 CSF of Hard Surfaced Hallways (Need Full Feature Mode and Guidelines)

From APPA Book: There are 7,851 CSF of hard surfaced hallways in Barton Hall. How many FTE are required to service them at Cleaning Level 2? At cleaning Level 3?

1. Open file ***APPA Barton Hall Base Data P-45 Fig-4.4-HECS-Data.xls*** if not already open.
2. Starting from the ***Main Menu,*** click ***Macro Staffing and Inventory*** button.
3. Click the ***Show All*** on the ***Record Navigator*** button to ensure your worksheet is not filtered
4. Click inside of the **Standard Space Category OR Local Custom Space Category** column in any row containing ***Public (Circulation) with Hard Floor***.
5. Click the ***Column Filter*** button on the ***Record Navigator*** and click ***Select on Cell Content*** to select all the ***Public (Circulation) with Hard Floor*** spaces.
6. Observe in the summary row that there are 17 of these spaces all assigned Level 2 service requiring 0.32 FTE.
7. To determine the FTE requirement for other cleaning levels you can run several reports
8. Click the ***Sel All*** button to select all 17 rows and click the ***Reports*** button
9. Click ***the Macro Staffing by Levels*** button .Observe (a) Level 1 requires 0.863 FTE; (b) Level 2 requires 0.320 FTE; (c) Level 3 require 0.220 FTE; and (d) Level 4 require 0.170 FTE
10. Click ***Cost of Cleaning by Levels*** button. Observe the same information in the FTE column of this report

Exercise APPA Figure 4.4, Page 40 : Barton Hall Space Inventory

(Need Full Feature Mode and Guidelines)

1. Starting from the **Main Menu,** click **Open.**
2. Select the file ***APPA Barton Hall Base Data P-40 and P-45 Fig-4.4 and Fig-4.5-HECS-Data.xls*** and click **OK.**
3. Click **Yes** to confirm. Click **Ok** to acknowledge the successful open and data validation message.
4. Click **Macro Staffing and Inventory Button.** Observe Inventory and macro staffing data.
5. Observe the information in the summary row of this worksheet and compare with the APPA book Figure 4.4 and note that the total space is 36,523 total CSF (see APPA book page 40).
6. Click in the first cell under the third column (**Floor Name/Number**) to select the cell containing a '***1***' for first floor. Click **Filter Column** then click **Select on Cell Content** button.
7. Observe the total for floor 1 to be **18,719** CSF in the top **Summary Row** matching the total for the first floor in the APPA Guidelines (see APPA book page 4.4).
8. Click in the **Floor Name/Number** column. Click **Filter Column** then click **Un-Filter Column** button to display all the records.
9. Scroll down until you see second floor data and click on any ***2*** under the **Floor Name/Number** column. Click **Filter Column** then click **Select on Cell Content** button.
10. Observe the **17,804 CSF** in the top **Summary Row** matching the total for the second floor in the APPA book Figure 4.4, page 40).
11. Click **Show All** button on **Records Navigator Toolbox** to show all records.
12. Click Main Menu either on the ***Standard Space Navigator*** or on the ***MiniToolbox*** to return to the main menu.

Exercise APPA Figure 4.5, Page-45: Barton Hall Staffing Summary
(Need Full Feature Mode and Guidelines)

1. Open file ***APPA Barton Hall Base Data P-40 and P-45 Fig-4.4 and Fig-4.5-HECS-Data.xls*** if not already open.
2. Starting from the ***Main Menu***, click ***Macro Staffing and Inventory*** button.
3. Click ***Show All*** button
4. Click in any row under any column in the data area of the worksheet.
5. Click ***Sel All*** button. Observe all 138 rows have been selected and the column you clicked in is highlighted.
6. In the MiniToolbox in upper right corner of screen click **Reports** button.
7. On the ***Reports Generator Toolbox***, click ***Macro Staffing by Level Report*** button.
8. Compare the staffing number in the ***CleanOpsStaff-3ed*** report with those in APPA Book Figure 4.5, page 45. Note that ***CleanOpsStaff-3ed*** sorts the Space Categories in alphabetical order.
9. On the ***Report Generator Toolbox*** click ***Close Reports*** button to return to the ***Macro Staffing and Inventory*** worksheet.
10. Click ***Main Menu*** either on ***MiniToolbox;*** or on the ***Mini*** **Main Menu** button in the upper right of the screen in the ***Main Panel***; or on the ***Report Generator***.

Additional Description Cell			Level 1		Level 2		Level 3		Level 4		Level 5		Level C2	
		36,523	10,109	3.613	19,753	1.85	29,289	1.25	38,731	0.94	47,126	0.78	19,753	1.85
Seq	Space Category	Total Cleanable sq. ft.	sq. ft. per custodian	No of cust.	sq. ft. per custodian	No of cust.	sq. ft. per custodian	No of cust.	sq. ft. per custodian	No of cust.	sq. ft. per custodian	No of cust.	sq. ft. per custodian	No of cust.
1	Classroom With Hard Floor	5.800	10.232	0.567	19.132	0.303	31.952	0.182	43.441	0.134	48.507	0.120	19.132	0.303

Exercise APPA Example 2, Page 46: Develop work schedules for the two "resource leveled" workers in Barton Hall (Need Full Feature Mode and Guidelines)

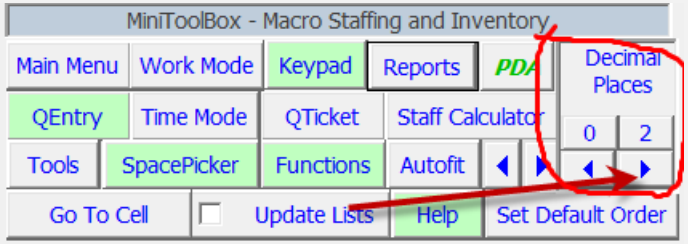
From APPA Book: You have calculated your staffing requirements for cleaning at 43 FTE. Your human resources people advise you that your "average" employee is eligible for and uses 15 days of annual leave, 8 days of sick leave, 2 days of personal leave, and 1.6 days of some type of other leave, including Workers Compensation or unpaid leave, per year. How many additional FTE do you need to cover these circumstances?

1. Starting in the Main Menu worksheet, click the ***Close*** button close any open inventory file.
2. You will use the ***Staff Calculator*** and the ***Configuration Form*** for to solve this problem.
3. In the first row enter ***All Bldgs*** for building name; ***All Floors*** for floor name; ***All Rooms*** for room name. You are creating a dummy inventory requiring 43 FTEs
4. Click ***Staff Calculator*** and select ***Classroom With Hard Floor*** from the ***Type*** dropdown list. It does not matter which category you pick since you are just creating a dummy 43 FTE inventory
5. Click the ***CSF*** button to blank out the ***1,200*** in the ***CSF input box***. Replace .06272 with 43.0 in the ***FTEs input box***
6. Click ***Compute***
7. Click inside the first row of the worksheet and click ***Paste*** button on the ***Staff Calculator*** and click ***Yes***. Close the ***Staff Calculator***
8. Right click in the worksheet and select ***Configuration*** from the shortcut menu.
9. In the ***Local Number of Work Days per year*** box, enter 223.4 (250 – 26.6)
10. Click the ***Write Configuration Variables from Form to Memory*** button and click **Yes**. Note that you now need 48.12 FTEs or 5.1 (48.12-43) additional FTEs.
11. This calculation differ from the 4.5 additional FTEs computed in the APPA book because CleanOpsStaff-3ed uses the proportional relation between 223.4 day per year and 250 days per year (48.12 =43 x 250/223.4). Both method are acceptable and mathematically justified

Exercise APPA Example 1, P-49:Room 101A in Barton Hall as APPA Standard Office (Need Full Feature Mode and Guidelines)

From APPA Book: Room 101A in Barton Hall is "Treated like" an APPA Standard Office with Carpet. The assignment is to determine what portion of a FTE will be required to service it at cleaning Level 2 and how many minutes should be set aside to perform "routine" cleaning activities.

1. Open file ***Open file APPA Barton Hall Base Data P-54 Fig-5.2-HECS-Data.xls*** if not already open. While in the Macro Staffing and Inventory worksheet, click ***Show All*** button to show all rows
2. Click the ***Work Mode*** button to put the work sheet in (***Routine in Minutes)*** mode
3. Click inside row 13 for room ***101A*** to highlight the row. Observe that it requires ***0.005*** FTEs and ***2.07*** minutes to be set aside per day
4. To display the 0.005 with more or less decimal places to agree with the APPA book, click the cell containing 0.005 then click the ***Right Decimal Arrow*** and ***Right Decimal Arrow*** in the ***MiniToolBox*** in the ***Decimal Places*** frame
5. Observe that CleanOpsStaff-3ed and the APPA book show ***0.0493*** FTEs when the number of decimal places is increased



APPA Exercise Defining Routine Activities, Page 50
(Need Full Feature Mode and Guidelines)

From APPA Book: Using Barton Hall as the example, carefully review each standard APPA space category contained therein for the frequency you intend to perform each and every task. For this example, assume that all activity frequencies in the space categories are okay at Level 2, except that you want to damp-mop all hard floor classrooms once a week rather than once a month. You would then have to change the standard space matrix to that shown in Figure 5.1 with the methods used in Chapter 2.

1. Open file ***APPA Barton Hall Base Data P-40 and P-45 Fig-4.4 and Fig-4.5-HECS-Data.xls*** if not already open. While in the Macro Staffing and Inventory worksheet, click ***Show All*** button.
2. Click the ***Work Mode*** button to put the work sheet in (***Both in Minutes)*** mode. Observe that it takes 1.85 FTEs to perform at Level 2 when 420 productive minute per day are available.
3. You will change damp-mop from a project monthly task to a routine weekly task for ***Classrooms with Hard Floors***.
4. Create a local category for ***Local Classroom with Hard Floor*** to accomplish this. Ensure the ***BASE CSF Checkbox*** is unchecked
5. After creating the ***Local Classroom With Hard Floor*** matrix, it should look like the screenshot to the right
6. Compare your local matrix with APPA book Figure 5.1 on page 51

Click here to select and activate Local Space Category Navigator (1st/34)

34 - Local Space Category Name	Local Classroom With Hard Floor			
Based on Standard type	Classroom With Hard Floor			
Base CSF	1,200.	No Of Cust(FTE)	.07	
Total Adjusted Minutes	28.85	Std Type No	1.	
CSF/Custodian	17,472.	Spaces/Cust	14.56	

	Activity	Frequency	Adjusted Minutes (28.85)	Base Time (511.38)	
1-R	Spot clean walls and doors	W	.62	3.12	1
2-R	Relamp	D/A	.08	3.46	2
3-R	Clean Chalkboards and Trays	D	3.15	3.15	3
4-R	Dust flat surfaces	W	.23	1.16	4
5-R	Empty waste containers	D	.46	.46	5
6-R	Empty pencil sharpeners	D	.4	.4	6
7-R	Sweep, dust-mop floors	D	16.4	16.4	7
8-R	Clean erasers	D	.6	.6	8
9-R	Damp-mop floors	W	3.32	16.61	9
10-P	Dust blinds	A	.02	4.95	1
11-P	Project-clean furniture and seating	A	.29	73.73	1
12-P	Clean trash containers	S/A	.01	1.01	1
13-P	Dust vents	Q	.02	1.5	1
14-P	Perform interim floor care	Q	1.4	87.76	1
15-P	Strip/refinish floors	A	.67	166.64	1
16-P	Clean windows	A	.06	14.23	1
17-P	Project-clean light fixtures	A	.4	101.24	1
18-P	Spray-buff/burnish floors	M	.72	14.96	1

APPA Exercise Defining Routine Activities, Page 50 (Cont'd)

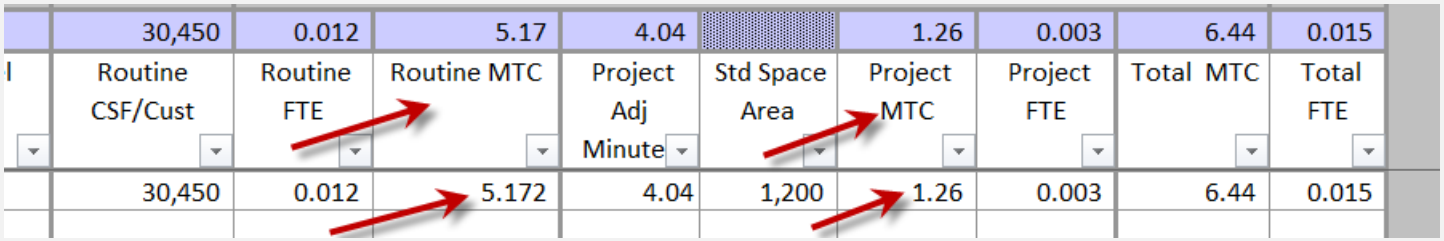
1. You now want to reassign all the ***Classroom with Hard Floor*** spaces to ***Local Classroom with Hard Floor***
2. Click ***Main Menu*** button. Click ***Macro Staffing and Inventory*** button.
3. Observe the Total FTEs = 1.85 and Total Minute per day = 776.69 minutes
4. Find the nine ***Classroom with Hard Floor*** spaces and change the category to ***Local Classroom with Hard Floor***
5. Observe that the Total FTEs changed from ***1.85*** FTEs to ***1.88*** FTEs and Minutes to Clean because of the extra damp mopping you will be doing in ***Classroom with Hard Floor*** spaces

6. **Note:** Open ***APPA Barton Hall Base Data P-45 Fig-5.2-HECS-Data.xls*** to see the text book solution to the above exercise

Exercise APPA Example 2, Page-52: Room 103A in Barton Hall as APPA Standard Carpeted Office
(Need Full Feature Mode and Guidelines)

From APPA Book: Room 103A of Barton Hall is a standard APPA space of Carpeted Office and contains 375 CSF. How many routine and project FTE are required to clean the space and what are the routine and project minutes to clean for that space?

1. Open file ***Open file APPA Barton Hall Base Data P-54 Fig-5.2-HECS-Data.xls*** if not already open. While in the ***Macro Staffing and Inventory*** worksheet, click ***Show All*** button to show all rows
2. Click the ***Work Mode*** button to put the work sheet in (***Both in Minutes)*** mode
3. Click row 20 for room ***103A*** to select and highlight it.
4. Click ***Reports*** button. Click ***Micro Staffing by Room or Bldg*** button. Click ***By Room*** button
5. Observe from the report that Routine FTE = **0.012** FTEs; and Project FTE is **0.003** FTEs
6. Observe that the Routine Minutes to Clean (MTC) = **5.17** minutes; and Project MTC = **1.26** minutes



	30,450	0.012	5.17	4.04		1.26	0.003	6.44	0.015
I	Routine CSF/Cust	Routine FTE	Routine MTC	Project Adj Minute	Std Space Area	Project MTC	Project FTE	Total MTC	Total FTE
	30,450	0.012	5.172	4.04	1,200	1.26	0.003	6.44	0.015

Exercise APPA Minutes to Clean for Barton Hall First and Second Floor, Page 53
(Need Full Feature Mode and Guidelines)

1. Starting from the **Main Menu,** click **Open.**
2. Select the file ***APPA Barton Hall Base Data P-54 Fig-5.2 Floor 1 and 2-HECS-Data.xls*** and click **OK.**
3. Click **Yes** to confirm. Click **Ok** to acknowledge a successful open and data validation.
4. Click **Macro Staffing and Inventory** button. Observe Inventory and macro staffing data.
5. Click in any row under the third column (**Floor Name/Number**) to select the cell containing a ***'1'*** for first floor. Click **Filter Column** then click **Select on Cell** button.
6. Observe the in the ***Summary Row*** at the top of the worksheet, 66 Spaces and 18,719 CSF. And 1.01 FTEs
7. In the MiniToolbox, click **Work Mode** button to switch to **Routine in Minutes** mode.
8. Compare the ***CleanOpsStaff-3ed*** last three data columns with the APPA book Figure 5.2 (floor 1)/Figure 5.3 (floor 2). first three data columns for Routine **CSF/Cust**, **Routine FTE** and **Routine MTC** . Please note that the columns are not in the same order.
9. In the MiniToolbox, click **Work Mode** button to switch to **Projects in Minutes** mode. Compare the CleanOpsStaff-3ed last two data columns with the APPA book Figure 5.2 (floor 1)/Figure 5.3 (floor 2). **Project MTC** and **Project FTE** columns. Note that floor 1 has **0.139** FTEs of project work and floor 2 has **0.136** FTEs of project work
10. Repeat the above steps for the second floor

Note: MTC means minutes to clean and refers to the number of minutes you must set aside per day to clean at the selected cleaning level. The sum of the minutes based on the frequency of performing tasks, the number of minutes in a work day and the number of work days in a year is converted to FTEs.

Exercise APPA Minutes to Clean for Barton Hall First and Second Floor, Page 53
Using the Micro Staffing by Room
(Need Full Feature Mode and Guidelines)

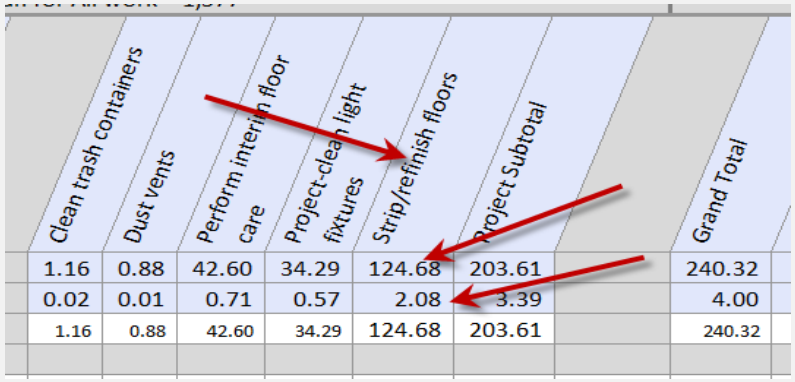
1. Open ***APPA Barton Hall Base Data P-54 Fig-5.2 Floor 1 and 2-HECS-Data.xls*** if not already open
2. To see a report that more closely resembles Figure 5.2 follow the below instruction to run the **Micro Staffing by Room** report. Click ***Show All*** button
3. Click in any row under the third column (**Floor Name/Number**) to select the cell containing a ***'1'*** for first floor. Click **Filter Column** then click **Select on Cell** button.
4. In the MiniToolbox in upper right corner of screen click **Reports Button.**
5. On the **Reports Generator Toolbox**, click ***Micro Staffing by Room of By Bldg*** button. Click ***By Room*** button
6. Compare the staffing number with those in APPA book Figure 5.2 (floor 1)/Figure 5.3 (floor 2). Minor differences are due to different rounding methods.
7. On the **Report Generator Toolbox** click the **Close Reports** button to return the **Macro Staffing and Inventory** worksheet.
8. Click **Main Menu** either on MiniToolbox or on the **Hide/Show Toolbox** in the upper right of the screen in the **Main Panel.**
9. Repeat the above steps for the second floor

Exercise APPA Example 3, Page 57: Strip and refinish the 788 CSF hallway # 100K

(Need Full Feature Mode and Guidelines)

From APPA Book: How much time should it take to strip and refinish the 788 CSF hallway # 100K in Barton Hall?

1. Open file ***APPA Barton Hall Base Data P-40 and P-45 Fig-4.4 and Fig-4.5-HECS-Data.xls*** if not already open. While in the Macro Staffing and Inventory worksheet, click ***Show All*** button to show all rows
2. Click the ***Work Mode*** button to put the work sheet in (***Both in Minutes)*** mode
3. Look for row 20 for room ***103A*** and click inside the row to select and highlight it.
4. Click ***Reports*** button. Click ***Time to Clean*** button.
5. Find the ***Strip/refinish Floors*** task in the report headings
6. Observe that the that it take ***125.68*** minutes/***2.08*** hours to complete this task for room 100K



Exercise APPA Example 3, Page 57: Project Work For Public Area

(Need Full Feature Mode and Guidelines)

In the second part of this exercise you will determine how much time it take to perform the project work for the public circulation areas with hard floor

1. Open file ***APPA Barton Hall Base Data P-40 and P-45 Fig-4.4 and Fig-4.5-HECS-Data.xls*** if not already open. . While in the Macro Staffing and Inventory worksheet, click ***Show All*** button to show all rows
2. Find the first occurrence of ***Public (Circulation) with Hard Floor*** space and click on it
3. Click ***Column Filter***. Click Select On ***Cell Content***. Observe 17 spaces
4. Select all the spaces by clicking the ***Sel All*** button
5. Click ***Reports*** button. Click ***Time to Clean*** button
6. Compare the ***Total Minutes To Clean*** and the ***Total Hours to Clean*** with APPA book Figure 5.4, page 58. Note that the column are in different order as well as the rows,

Time To Clean Report — or Routine work = 3,617

Public (Circulation) with Hard Floor — or Project work = 1,625

Enter Additional Description Here — or All work = 1,377

Seq	Building	Floor	Room	CSF	Level	Clean trash containers	Dust vents	Perform interim floor care	Project-clean light fixtures	Strip/refinish floors	Project Subtotal
Total Minutes To Clean						11.58	8.80	424.44	341.68	1,242.22	2,028.72
Total Hours To Clean						0.19	0.15	7.07	5.69	20.70	33.80
13	Barton Hall	1	101	525	Level 2	0.77	0.59	28.38	22.85	83.07	135.66
14	Barton Hall	1	103	825	Level 2	1.22	0.93	44.60	35.90	130.53	213.18
15	Barton Hall	1	100K	788	Level 2	1.16	0.88	42.60	34.29	124.68	203.61
27	Barton Hall	1	100R	1150	Level 2	1.70	1.29	62.17	50.05	181.96	297.17
28	Barton Hall	1	100M	75	Level 2	0.11	0.08	4.05	3.26	11.87	19.37
32	Barton Hall	1	100N	625	Level 2	0.92	0.70	33.79	27.20	98.89	161.50
55	Barton Hall	1	100P	431	Level 2	0.64	0.48	23.30	18.76	68.19	111.37
60	Barton Hall	1	100Q	186	Level 2	0.27	0.21	10.06	8.09	29.43	48.06
68	Barton Hall	2	200J	273	Level 2	0.40	0.31	14.76	11.88	43.20	70.55
81	Barton Hall	2	200K	286	Level 2	0.42	0.32	15.46	12.45	45.25	73.90
92	Barton Hall	2	232	338	Level 2	0.50	0.38	18.27	14.71	53.48	87.34
94	Barton Hall	2	200L	478	Level 2	0.71	0.54	25.84	20.80	75.63	123.52
96	Barton Hall	2	200R	427	Level 2	0.63	0.48	23.08	18.58	67.56	110.33
97	Barton Hall	2	200Q	282	Level 2	0.42	0.32	15.25	12.27	44.62	72.88
98	Barton Hall	2	200P	154	Level 2	0.23	0.17	8.33	6.70	24.37	39.80
99	Barton Hall	2	200M	427	Level 2	0.63	0.48	23.08	18.58	67.56	110.33
132	Barton Hall	2	200N	581	Level 2	0.86	0.65	31.41	25.29	91.93	150.14
End of Category											

Exercise APPA Example 3, Page 57: Project Work For Public Area (Cont'd)

(Need Full Feature Mode and Guidelines)

7. Observe the summary information at the top of the report.
8. Number of Custodian-days for Routine work = .87 means that if one custodian were to perform all the routine tasks listed in the report it would take .87 day
9. Number of Custodian-days for Project work = 4.83 means that if one custodian were to perform all the project tasks listed in the report it would take 4.83 days
10. Total Number of Custodian-days = 5.70 means that if one custodian were to perform all the routine and project tasks listed in the report it would take 5.70 days
11. NOTE: The numbers in steps 8-10 should not be confused with FTE calculations. The above numbers has to do with how long it take to perform tasks while FTE has to do with how many custodians are needed on a recurring basis to clean an inventory of space at a specified cleaning level

Category 1 of 1

Time To Clean Report

Public (Circulation) with Hard Floor

Enter Additional Description Here

Total Cleanable Square Feet (CSF) = 7,851
Number of Custodian-days for Routine work = .87
Number of Custodian-days for Project work = 4.83
Total Number of Custodian-days = 5.70

Number of Spaces to clean = 17
CSF per Custodian for Routine work = 9,017
CSF per Custodian for Project work = 1,625
CSF per Custodian for All work = 1,377

Seq	Building	Floor	Room	CSF	Level	Auto-scrub floor	Clean telephones	Clean water fountain	Dust flat surfaces	Empty and clean ashtrays	Empty waste containers	Relamp	Spot-clean walls and doors	Spray-buff/burnish floors	Sweep, dust-mop floors	Routine Subtotal	Clean trash containers	Dust vents	Perform interim floor care	Project-clean light fixtures	Strip/refinish floors	Project Subtotal	Grand Total
Total Minutes To Clean						83.76	3.70	6.36	7.64	1.94	4.67	19.40	11.49	178.87	47.84	365.67	11.58	8.80	424.44	341.68	1,242.22	2,028.72	2,394.39
Total Hours To Clean						1.40	0.06	0.11	0.13	0.03	0.08	0.32	0.19	2.98	0.80	6.10	0.19	0.15	7.07	5.69	20.70	33.80	39.90

Exercise APPA Example 4, Page 57: Develop work schedules for the two "resource leveled" workers in Barton Hall

(Need Full Feature Mode and Guidelines)

From APPA Book: Develop work schedules for the two "resource leveled" workers in Barton Hall. There is monthly and quarterly project work, such as spray-buffing or vent dusting that cannot wait until break times. This must be worked into the weekly schedule. Contractually, you are required to provide two 15-minute lunch breaks and a 15-minute wash-up time per worker. You are also required to provide the service of locking and unlocking various doors, and custodial staff is also responsible for certain conference setups. Your shifts are 8 hours, or 480 minutes per day. Although this exercise assumes a 7-hour or 420-productive-minute day, work schedules must account for all time.

1. Open file ***Open file APPA Barton Hall Base Data P-54 Fig-5.2-HECS-Data.xls*** if not already open. While in the Macro Staffing and Inventory worksheet, click ***Show All*** button
2. Click the ***Work Mode*** button to put the work sheet in (***Both in Minutes)*** mode. Observe that it takes ***1.88 FTEs*** and ***789*** minutes per day to clean to perform at Level 2 when 420 productive minute per day are available.
3. However, after deducting times for breaks and, Wash-Up, and Setups, you only have 770 total minutes or 385 minutes (770/2) in the work day per custodian for cleaning. You will use the configuration form to adjust for this non-cleaning time
4. Right click in the worksheet and select ***Configuration*** from the shortcut menu
5. Change the ***420*** to ***385*** in the ***Local Number of Minutes in day*** input box
6. Click ***Write Configuration Variables from Form To Memory*** button
7. Click the ***Local*** radio button to select ***Local***
8. Observe that the ***1.85 FTEs*** increase to ***2.049 FTEs*** to provide the same level of cleaning services while also performing the non-cleaning tasks because there are fewer minutes in the day available for cleaning tasks.
9. Note that the 19 minute shortage mentioned in the APPA book is equivalent to about 0.049 FTE (19/385 = 0.049) when only 385 minutes per day per custodian is available.

Exercise APPA Example 5, Page 60: Project Work For Public Area

(Need Full Feature Mode and Guidelines)

From APPA Book: To get on initial evaluation of the time required for vacuuming floors and straightening furniture on the second floor offices in Barton Hall, you would calculate the absolute time for each space. How much time will it take to vacuum the floor and straighten furniture in room 201/A/B/C?

- **That space, from the inventory, contains 1,136 CSF. The base time to perform that task in the standard 1,200 CSF carpeted office is 16.13 minutes. Therefore, 1,136 x 16.13 /1,200 = 15.27 minutes.**

1. Open file ***APPA Barton Hall Base Data P-40 and P-45 Fig-4.4 and Fig-4.5-HECS-Data.xls*** if not already open. While in the Macro Staffing and Inventory worksheet, click ***Show All*** button to show all rows
2. Click ***QEntry***. Click ***Un-Check All*** to uncheck all ***QEntry*** checkboxes. Enter ***201**** in the ***Space*** input box. Check the ***Space*** checkbox.
3. Click ***Apply Filter***. Observe that only rooms 201A, 201B and 201 C are visible and the summary row show 3 spaces at 1,136 CSF. Close ***QEntry***.
4. Click ***Sel All***. Click ***Reports***. Click ***Time To Clean***. Observe the 15.57 minutes requires the for vacuuming floors and straightening furniture in these three rooms

Category 1 of 1

Time To Clean Report

Office with Carpet Floor

Enter Additional Description Here

Total Cleanable Square Feet (CSF) = 1,136

Number of Custodian-days for Routine work = .10

Number of Custodian-days for Project work = .74

Total Number of Custodian-days = .84

Seq	Building	Floor	Room	CSF	Level	Clean telephones	Dust furniture and flat surfaces	Empty and clean ashtrays	Empty waste containers	Relamp	Spot-clean carpet	Spot-clean walls, partitions, and doors	Vacuum carpet and straighten furniture	Routine Subtotal
Total Minutes To Clean						3.95	2.67	0.47	4.13	3.28	8.02	4.50	15.27	42.29
Total Hours To Clean						0.07	0.04	0.01	0.07	0.05	0.13	0.08	0.25	0.70
77	Barton Hall	2	201A	700	Level 2	2.43	1.65	0.29	2.55	2.02	4.94	2.77	9.41	26.06
78	Barton Hall	2	201B	300	Level 2	1.04	0.71	0.12	1.09	0.87	2.12	1.19	4.03	11.17
79	Barton Hall	2	201C	136	Level 2	0.47	0.32	0.06	0.49	0.39	0.96	0.54	1.83	5.06
End of Category														

Exercise APPA Example 5, Page 60: Project Work For Public Area (Cont'd)

(Need Full Feature Mode and Guidelines)

Now to determine how long it will take for vacuuming floors and straightening furniture in all carpeted offices on the second floor in Barton Hall

1. Open file ***APPA Barton Hall Base Data P-40 and P-45 Fig-4.4 and Fig-4.5-HECS-Data.xls*** if not already open. While in the Macro Staffing and Inventory worksheet, click ***Show All*** button to show all rows
2. Click ***QEntry***. Click ***Un-Check All*** to uncheck all ***QEntry*** checkboxes. Check the ***Floor*** checkbox. Enter ***'2'*** in the ***Floor*** input box. Check the ***Space Category*** checkbox. Select ***Office with Carpet Floor*** from the ***Space Category*** dropdown list.
3. Click ***Apply Filter***. Observe that summary row show 50 spaces at 10,735 CSF. Close ***QEntry***.
4. Click ***Sel All***. Click ***Reports***. Click ***Time To Clean***. Observe the 144.26 minutes requires the for vacuuming floors and straightening furniture in these 50 rooms. Compare this to the TOTAL line in APPA book Figure 5.6, page 62

Category 1 of 1

Time To Clean Report

Office with Carpet Floor

Enter Additional Description Here

Total Cleanable Square Feet (CSF) = 10,735

Number of Custodian-days for Routine work = .95

Number of Custodian-days for Project work = 6.99

Total Number of Custodian-days = 7.94

Seq	Building	Floor	Room	CSF	Level	Clean telephones	Dust furniture and flat surfaces	Empty and clean ashtrays	Empty waste containers	Relamp	Spot-clean carpet	Spot-clean walls, partitions, and doors	Vacuum carpet and straighten furniture	Routine Subtotal
Total Minutes To Clean						37.30	25.24	4.44	39.06	30.95	75.75	42.53	144.26	399.53
Total Hours To Clean						0.62	0.42	0.07	0.65	0.52	1.26	0.71	2.40	6.65
77	Barton Hall	2	201A	700	Level 2	2.43	1.65	0.29	2.55	2.02	4.94	2.77	9.41	26.06

Exercise APPA Example 1, Page 64: Figure 6.1: Costs to Clean Barton Hall

(Need Full Feature Mode and Guidelines)

From APPA Book: Determine cleaning costs for each cleaning level in Barton Hall based on the staffing calculated for Figure 6.1. Assume your average wage rate is $11.00, your fringe loading factor is 25 percent, supply expenses are 10 percent of direct labor, and capital cost allowance is 5 percent of direct labor.

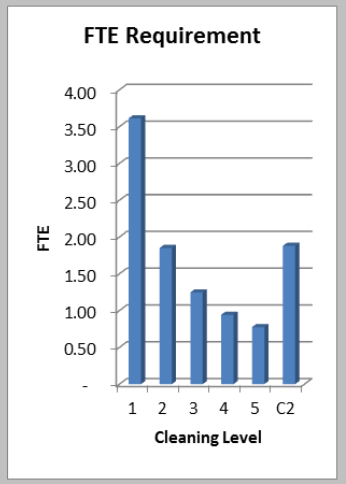
1. Open file ***APPA Barton Hall Base Data P-54 Fig-5.2 Floor 1 and 2-HECS-Data.xls*** if not already open. While in the Macro Staffing and Inventory worksheet, click ***Show All*** button to show all rows
2. Click ***Sel All***. Click ***Reports***. Click ***Cost of Cleaning By Level***.
3. Compare the report with APPA book Figure 6.1, page 64
4. Note that values are also shown for the customized Level C2. These values defaults to be the same as Level 2 until you customize them

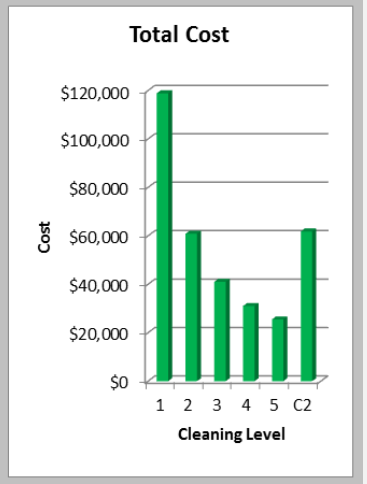
Cost of Cleaning by Level Report

Additional Description Cell

Cleaning Level	FTE	Direct Labor Cost	Supply Cost	Capital Cost	Total Cost
1	3.61	$103,332	$10,333	$5,167	$118,832
2	1.85	$52,910	$5,291	$2,646	$60,847
3	1.25	$35,664	$3,566	$1,783	$41,014
4	0.94	$26,970	$2,697	$1,348	$31,015
5	0.78	$22,165	$2,217	$1,108	$25,490
C2	1.88	$53,739	$5,374	$2,687	$61,800

Average Wages	11.00	Direct Labor = FTE x Avg Wages x Fringe x Hrs per Year
Fringe Factor	1.25	Supply Costs = Direct Labor x Supply Cost Factor
Hours per Year	2,080	Capital Cost = Direct Labor x Capital Cost Factor
Supply Costs	0.10	Total Costs = Direct Labor + Supply Cost + Capital Cost
Capital Budget	0.05	



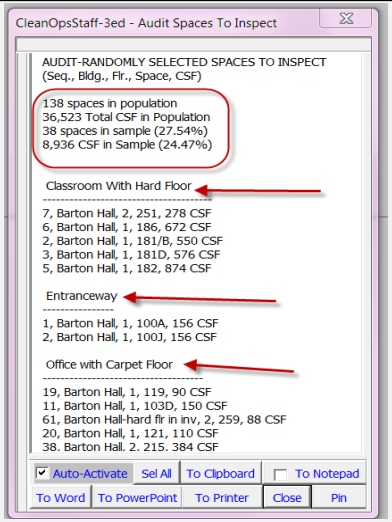


Exercise APPA Determining APPA Levels of Cleanliness in Buildings, Chapter 7, Pages 65-76

(Need Full Feature Mode and Guidelines)

In this exercise you will generate an audit package for Barton hall following the APPA book Chapter 7 audit and inspection protocol

1. Refer to the narrative in the Guidelines in APPA book pages 65-76
2. Open file ***APPA Barton Hall Base Data P-40 and P-45 Fig-4.4 and Fig-4.5-HECS-Data.xls***. While in the Macro Staffing and Inventory worksheet, click ***Show All*** button to show all rows
3. Click the ***Sel All*** button. Click the ***Reports***. Click ***Audit***. Ensure all three ***Make Audit Package Button Checkboxes*** are checked
4. Check the ***Make Audit Package*** button. Read the message and click ***No***. Observe that the audit package is being generated
5. Observe the ***Audit Spaces To Inspect*** mini-report appears on the right of your screen. This is a summary of the random and a listing of the spaces randomly selected for you to go inspect

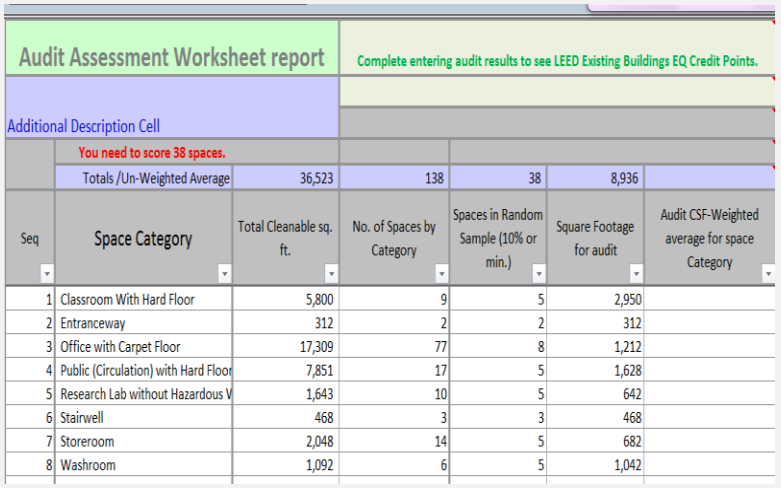


6. ***The Audit Random Sample*** information mini-report will appear as seen above. This information can be sent to other applications such as the Notepad or to the printer by clicking the buttons at the bottom of the box. You can then use the printout to plan your inspection route.
7. Observe the summary information at the top of the ***Audit Random Sample*** information mini-report. Then click inside the mini-report and scroll to see the spaces that have been randomly selected for you to inspect. **Click the gray edges at the top and side of the box to resize it.**
8. Close any instance of ***Windows NotePad*** that's open. Click inside the mini-report text box. Click the ***Sel All*** at the bottom of the mini-report. Click ***To Clipboard*** button. Click ***To NotePad***. Click inside **NotePad.** Click *Edit*. Click ***Paste***. This is one several techniques you can use to export the min-report to other applications

Exercise APPA Determining APPA Levels of Cleanliness in Buildings, Chapter 7, Pages 65-76 (cont'd)

(Need Full Feature Mode and Guidelines)

1. Observe the ***Audit Assessment Worksheet report*** to the left of the mini-report. This is one of three worksheets used by the audit package to allow you to record the results of your audit and to score the results to determine the actual cleaning level being achieved by your workforce.
2. The ***Audit Assessment Worksheet report*** is automatically completed when you record your inspection scores in the inspection ***Audit Instrument Report (inspection sheets)***.



Audit Assessment Worksheet report

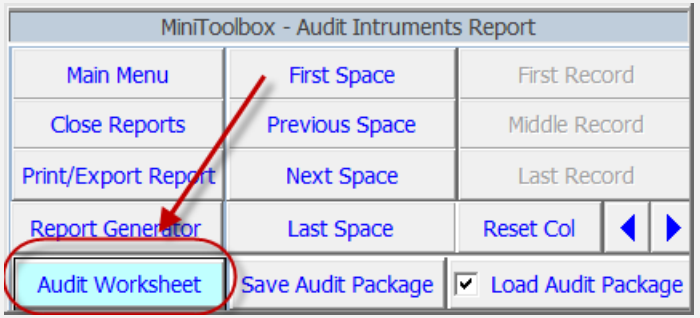
Complete entering audit results to see LEED Existing Buildings EQ Credit Points.

Additional Description Cell

You need to score 38 spaces.

	Totals /Un-Weighted Average	36,523	138	38	8,936	
Seq	Space Category	Total Cleanable sq. ft.	No. of Spaces by Category	Spaces in Random Sample (10% or min.)	Square Footage for audit	Audit CSF-Weighted average for space Category
1	Classroom With Hard Floor	5,800	9	5	2,950	
2	Entranceway	312	2	2	312	
3	Office with Carpet Floor	17,309	77	8	1,212	
4	Public (Circulation) with Hard Floor	7,851	17	5	1,628	
5	Research Lab without Hazardous V	1,643	10	5	642	
6	Stairwell	468	3	3	468	
7	Storeroom	2,048	14	5	682	
8	Washroom	1,092	6	5	1,042	

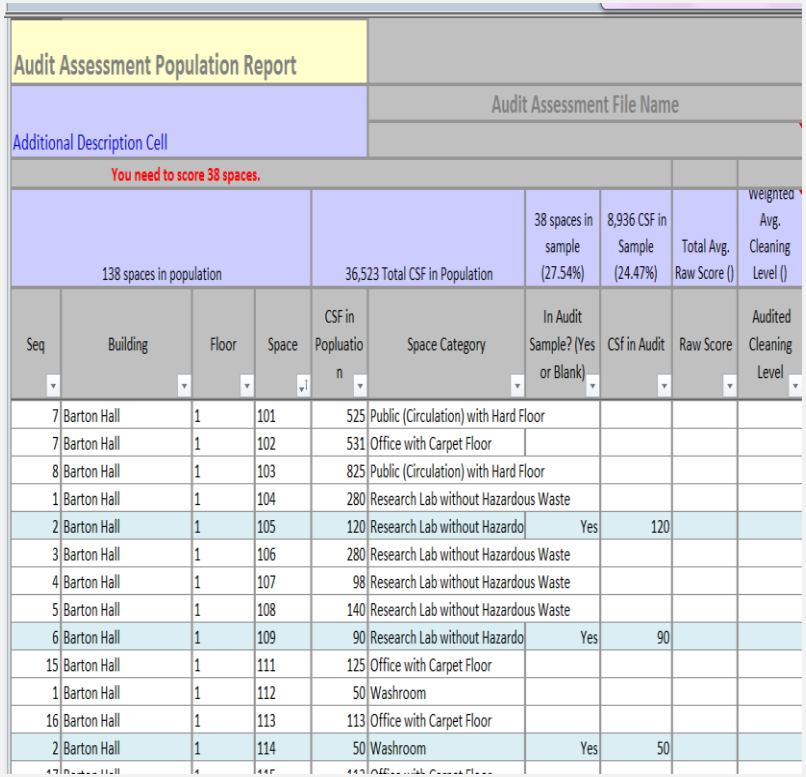
3. You will use the button in the lower left corner (***Audit Report Cycle Button***) of the ***MiniToolBox*** to cycle through the ***three Audit Package Report*** worksheets. The color of the button and its caption will change to let you know which report you will go to the next time to click it.
4. Click the ***Audit Report Cycle Button*** to cycle to the ***Audit Assessment Population Report***



Exercise APPA Determining APPA Levels of Cleanliness in Buildings, Chapter 7, Pages 65-76 (cont'd)

(Need Full Feature Mode and Guidelines)

1. The ***Audit Assessment Population Report*** as shown on the right is a listing of all the spaces involved in the audit. The randomly selected spaces are highlighted and denoted by "***Yes***" in the '***In Audit Sample? (Yes or Blank)***' column.
2. The ***Raw Score and Audited Cleaning Level*** column will be automatically populated when you enter your inspection results into the ***Audit Instrument Report***.
3. Scroll through the ***Audit Assessment Population Report*** and observe the randomly selected space and note that the CSF for them is also indicated
4. Click the ***Audit Report Cycle Button*** to cycle to the ***Audit Instrument Report***



Audit Assessment Population Report

Audit Assessment File Name

Additional Description Cell

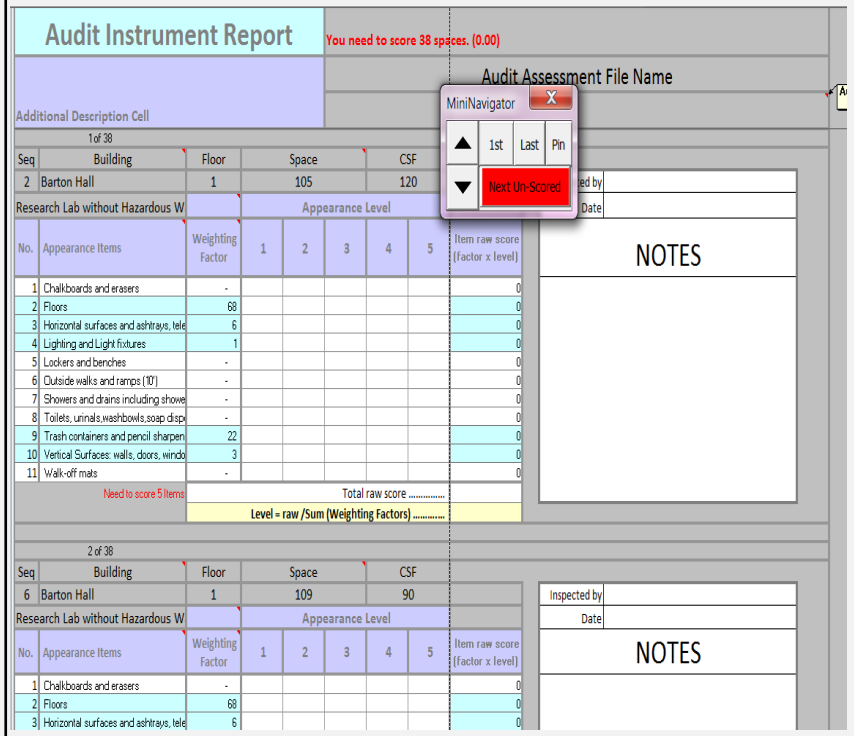
You need to score 38 spaces.

138 spaces in population				36,523 Total CSF in Population		38 spaces in sample (27.54%)	8,936 CSF in Sample (24.47%)	Total Avg. Raw Score ()	Weighted Avg. Cleaning Level ()
Seq	Building	Floor	Space	CSF in Popluation	Space Category	In Audit Sample? (Yes or Blank)	CSF in Audit	Raw Score	Audited Cleaning Level
7	Barton Hall	1	101	525	Public (Circulation) with Hard Floor				
7	Barton Hall	1	102	531	Office with Carpet Floor				
8	Barton Hall	1	103	825	Public (Circulation) with Hard Floor				
1	Barton Hall	1	104	280	Research Lab without Hazardous Waste				
2	Barton Hall	1	105	120	Research Lab without Hazardo	Yes	120		
3	Barton Hall	1	106	280	Research Lab without Hazardous Waste				
4	Barton Hall	1	107	98	Research Lab without Hazardous Waste				
5	Barton Hall	1	108	140	Research Lab without Hazardous Waste				
6	Barton Hall	1	109	90	Research Lab without Hazardo	Yes	90		
15	Barton Hall	1	111	125	Office with Carpet Floor				
1	Barton Hall	1	112	50	Washroom				
16	Barton Hall	1	113	113	Office with Carpet Floor				
2	Barton Hall	1	114	50	Washroom	Yes	50		

Exercise APPA Determining APPA Levels of Cleanliness in Buildings, Chapter 7, Pages 65-76 (cont'd)

(Need Full Feature Mode and Guidelines)

1. The ***Audit Instrument Report*** contains an inspection form for each randomly selected space for you to print and take with you during your inspection. Use the ***Mini-Navigator*** to move from form to form. Compare the Inspection Form with APPA book Appendix E pages 341- 349.
2. Click ***Save Audit Package*** and then click ***Save As Audit***. Click ***OK*** twice to accept TBD for inspector name and date
3. Click the ***Save*** button to see what other audit package files have been saved.
4. Clear the ***File Name*** input box and enter ***My Audit Package*** in the ***File Name*** input box (DO NOT enter the extension ***"-HECS-Audit.xls"***. ***CleanOpsStaff-3ed*** will add it automatically.)

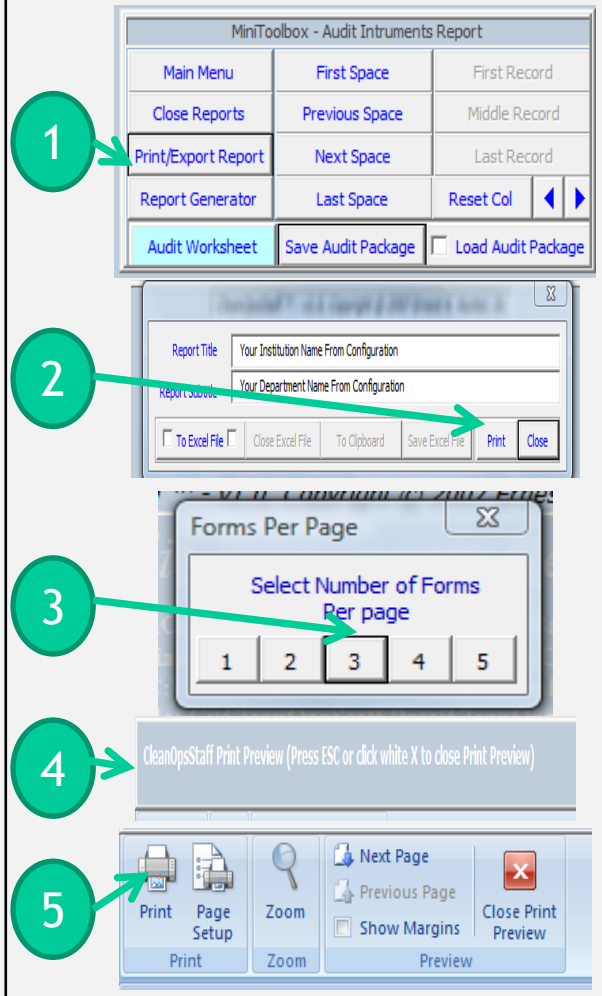


5. Click ***Save***, ***Yes***, and ***OK*** and observe the file name now appears in the ***Audit Assessment File Name*** cell in the report worksheet. You will load this file when you finish your inspection. **NOTE: Since the spaces to be inspected are selected randomly, you will not be able to recreate the exact same audit package if you forget to save the package.**
6. You are now ready to print the inspection forms. You can print 1 to 5 forms per page to put on a clipboard to record the results during your inspection.

Exercise APPA Determining APPA Levels of Cleanliness in Buildings, Chapter 7, Pages 65-76 (cont'd)

(Need Full Feature Mode and Guidelines)

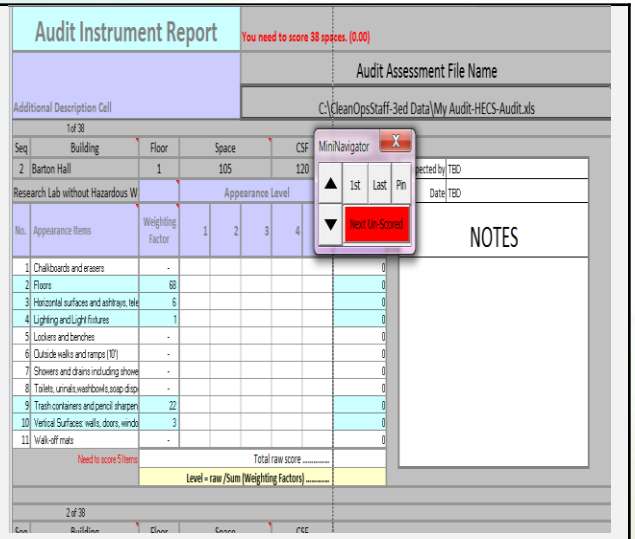
1. The ***Audit Instrument Report*** contains an inspection form for each randomly selected space for you to print and take with you during your inspection. You can print 1 to 5 forms per page to put on a clipboard to record the results during your inspection.
2. Refer to the screen shots in the right panel of this slide. Click ***Print/Export Report*** button. Click ***Print*** button. Click ***3*** button to print three forms per page. **(NOTE: if the screen shot in 5 does not appear, press the *ESC* key and repeat all of this step 2. Screen might appear slightly different for Excel 2003)**.
3. **Click the *Print (printer icon)*** and print the form in the normal way you would print any other document. If you do not have a printer connected then click ***Close Print Preview***.
4. Click ***Main Menu*** button to leave the Audit report
5. You are now ready to take the inspection forms to the field with you to inspect the randomly selected spaces.
6. While inspecting the spaces put a mark in the cleaning level box that best fit the cleanliness of the ***Appearance Item*** you are inspecting.
7. After conducting your inspection and recording your result on the inspection audit sheets, you are ready to start ***CleanOpsStaff-3ed***, load the Audit package file and record your results in ***CleanOpsStaff-3ed***.



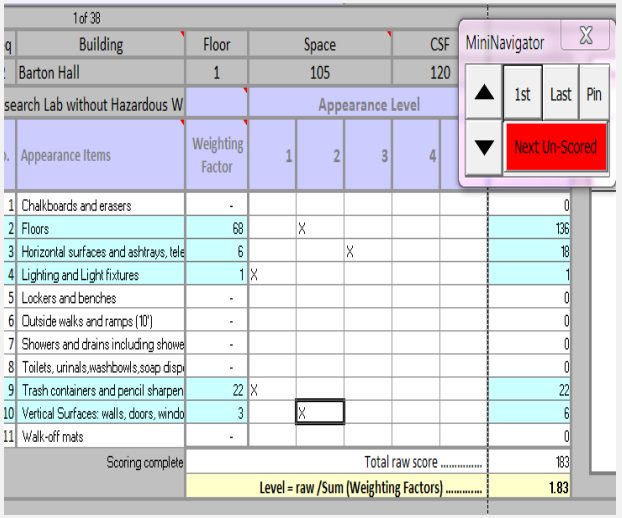
Exercise APPA Determining APPA Levels of Cleanliness in Buildings, Chapter 7, Pages 65-76 (cont'd)

(Need Full Feature Mode and Guidelines)

1. You are now ready to transfer your audit result from the hard copy audit sheets to the ***Audit Instrument Report***.
2. In the ***Macro Staffing & Inventory Worksheet***, click the ***Reports*** button on the ***MiniToolBox***.
3. Click the ***Audit*** button. Ensure ***Load Audit Package*** checkbox is checked. Click the ***Load Audit Package*** button.
4. Select ***My Audit Package-HECS-Audit.xls*** and click ***OK*** and ***Yes*** when prompted to do so.
5. If ***Mini-Navigator*** is not visible, right click and select it from the shortcut menu. You can move and pin the ***Mini-Navigator*** to any position on the screen you wish



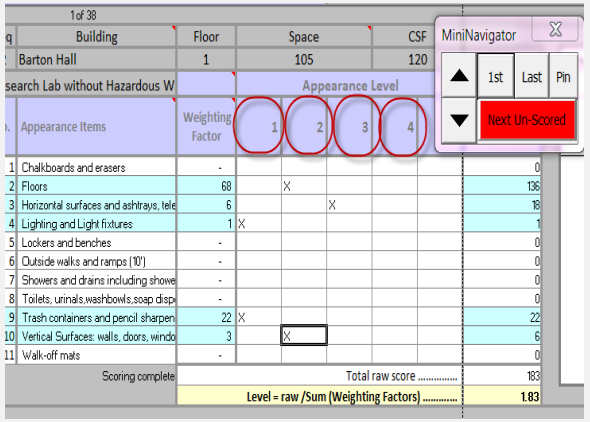
6. Click ***1st*** button on the ***Mini-Navigator*** to get to the first inspection form.
7. Note there are 5 ***Appearance Items*** to record the inspection results for room 105.
8. Click inside the cells as shown in the screen shot to the right and observe the ***'X'*** placed in the cell
9. When you have score all the appearance items a room score is computed and displayed at the bottom of the form
10. **When you are finished experimenting with the scoring and editing feature complete scoring all 38 space and go to next slide**



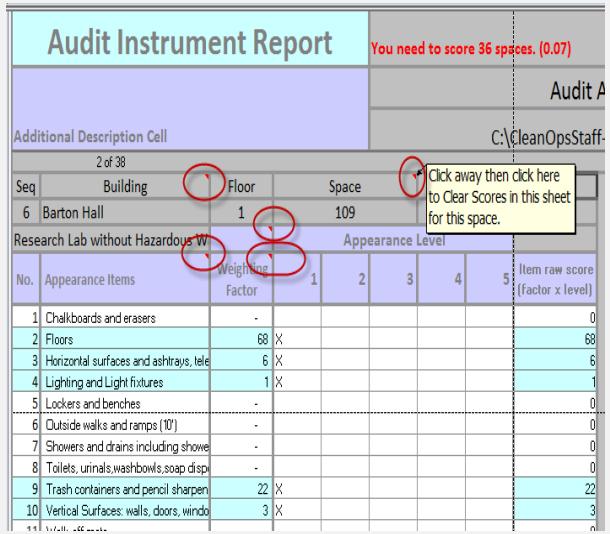
Exercise APPA Determining APPA Levels of Cleanliness in Buildings, Chapter 7, Pages 65-76 (cont'd)

(Need Full Feature Mode and Guidelines)

1. Click the ***Down Arrow*** on the ***Mini-Navigator*** to go to the next record
2. Click the 1, 2, 3 and 4 at the top of the form and observe that the clicked score get applied to all appearance items
3. Click the ***Down Arrow*** on the ***Mini-Navigator*** to go to the next record
4. Click the 2 and observe all appearance items scored at 2. Now click inside any appearance items cell to give it a score of 3. Note that the other item remain at 2.



5. Click the ***Down Arrow*** on the ***Mini-Navigator*** to go to the next record. Click the 2 to score all items as 2
6. Observe the five small red tick comment tick marks in the upper right corner of some of the cells in each form.
7. Roll your mouse point over each of the comment marks and pause to read the comment about these active cells.
8. These active cells allow you to edit the scoring of the form
9. Roll you mouse move each comment mark and perform the action it describes



Exercise APPA Determining APPA Levels of Cleanliness in Buildings, Chapter 7, Pages 65-76 (cont'd)

(Need Full Feature Mode and Guidelines)

1. The ***Audit Assessment Report*** should look similar to the screenshot below. Note that the ***Raw Un-Weighted Average Cleaning Level*** in the below screen shot is 1.79. This means that Barton Hall is being cleaned at Cleaning Level ***1.79*** which is a bit better than cleaning level 2. This calculation conforms to the APPA protocol and is the score submitted for LEED Existing Building credits.
2. The ***Space Weighted Average Cleaning Level*** of 2.01 is an extra calculation performed by ***CleanOpsStaff-3ed*** to adjust for large differences in CSF in each categories. For example the score Entranceways at only 312 CSF is weighted differently than the score for Office with Carpet Floor at 17,309 CSF
3. You can save the package, send it to another application and/or print it out for your future record.
4. NOTE: Hunter Consulting and Training has released CleanOpsStaff-3ed-ProMobile which will allows you to save the inspection sheet to the Smartphone/PDA, conduct the inspection using the PDA and then download the result from your PDA to CleanOpsStaff-3ed.

Audit Assessment Worksheet report

This Score qualifies for LEED Existing Buildings EQ Credit.

Space Weighted Average Cleaning Level = 2.01

Additional Description Cell

C:\CleanOpsStaff-3ed Data\My Audit-HECS-Audit.xls

All Spaces have been Scored

Raw Un-Weighted Average Cleaning Level = 1.79

	Totals /Un-Weighted Average	36,523	138	38	8,936	1.79
Seq	Space Category	Total Cleanable sq. ft.	No. of Spaces by Category	Spaces in Random Sample (10% or min.)	Square Footage for audit	Audit CSF-Weighted average for space Category
1	Classroom With Hard Floor	5,800	9	5	2,950	1.53
2	Entranceway	312	2	2	312	1.50
3	Office with Carpet Floor	17,309	77	8	1,212	2.34
4	Public (Circulation) with Hard Floor	7,851	17	5	1,628	1.78
5	Research Lab without Hazardous V	1,643	10	5	642	2.45
6	Stairwell	468	3	3	468	1.24
7	Storeroom	2,048	14	5	682	1.44
8	Washroom	1,092	6	5	1,042	2.00

The End

Very Best Regards,

Hunter Consulting and Training