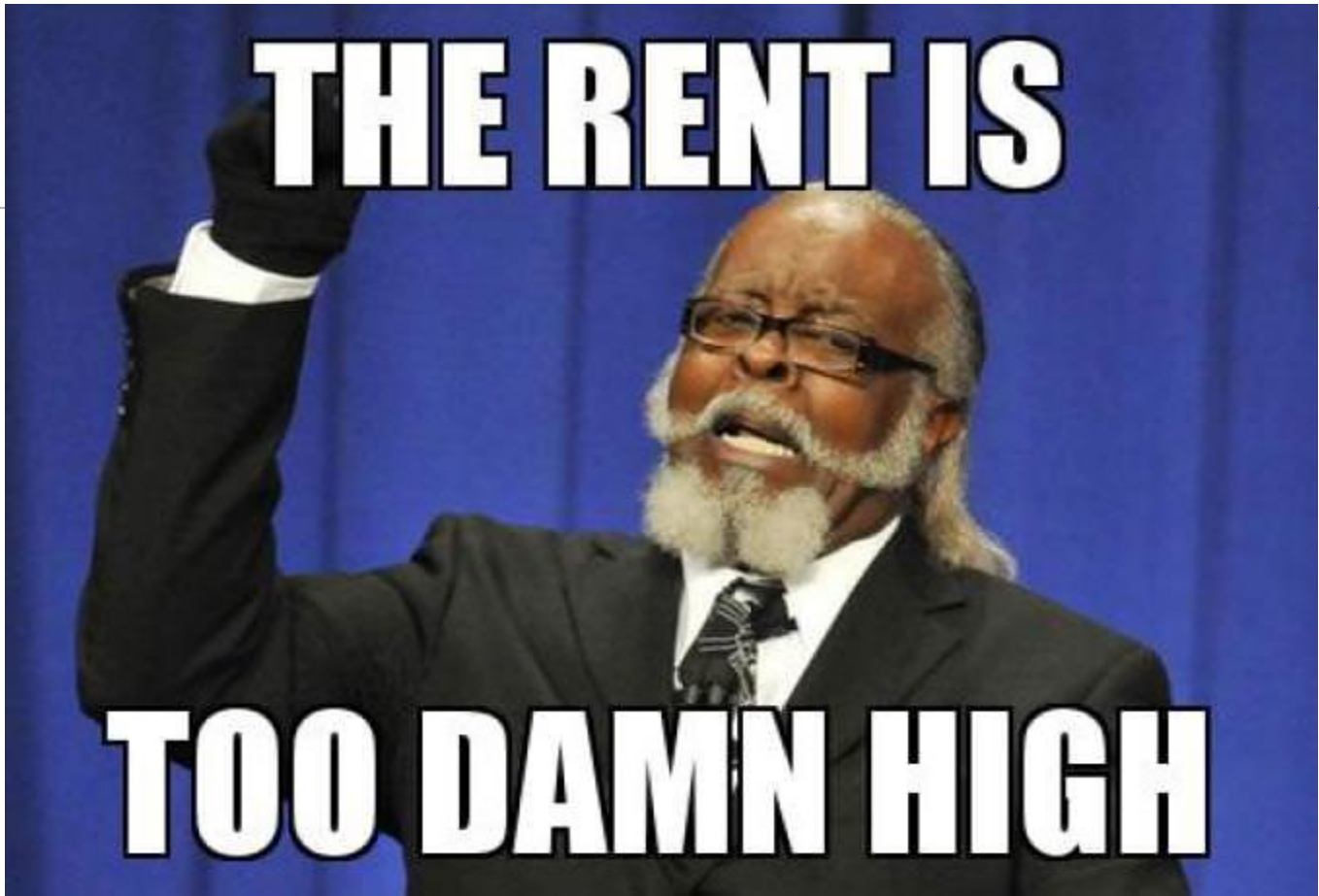
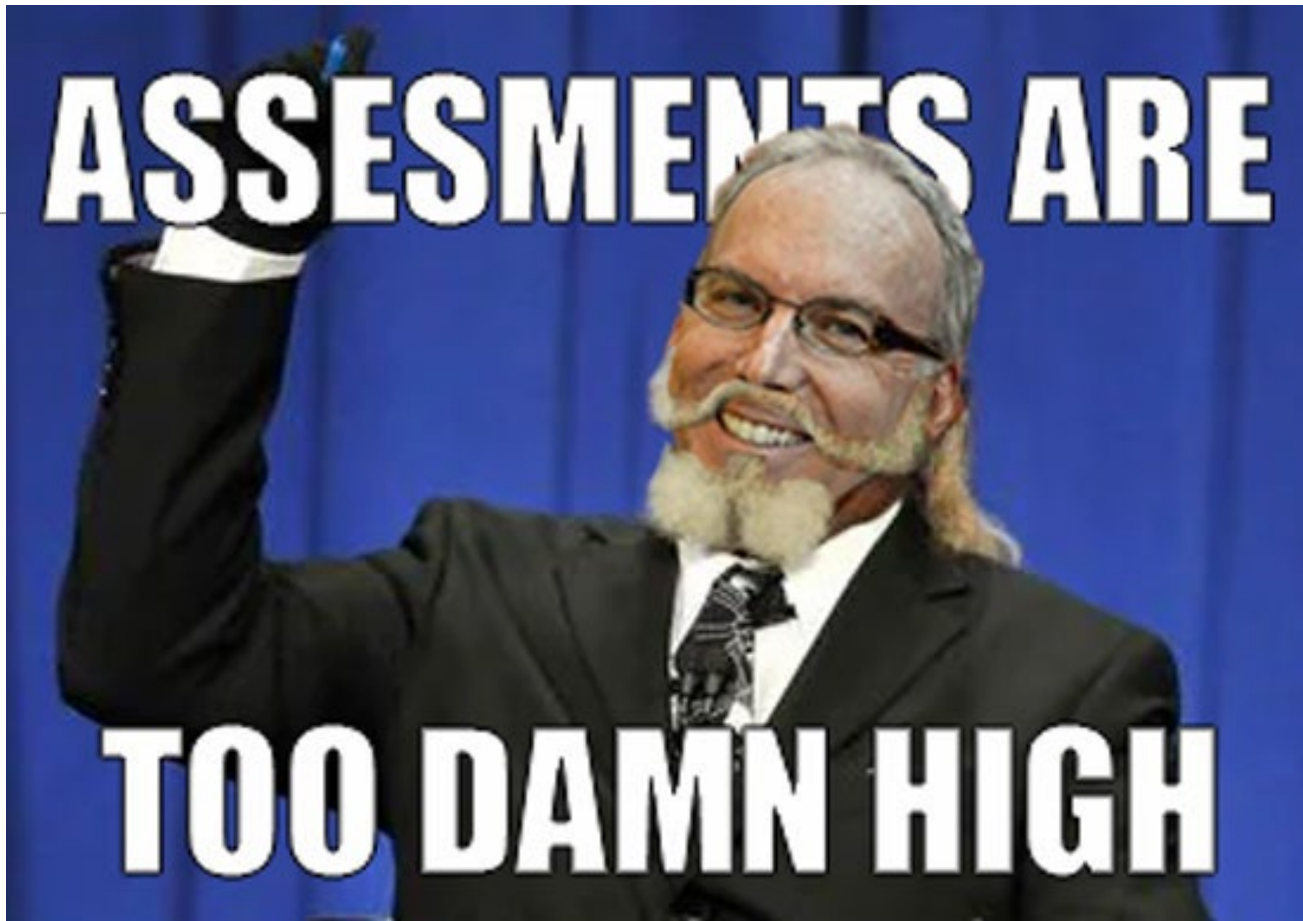


The BUILDER Shuffle

A Balancing Act of Data Requirements & Assessment Costs

Presented by Paul Schowalter





Information Overload - Building

Save Comment Reports 10501 - Andersen ▶ 11 - Andersen 1000 ▶ AJJY-1000 - 1000 ROTA DR - OFFICER HOUSING

Building No: AJJY-1000 Building Name: 1000 ROTA DR - OFFICER HOUSING

General Info Additional Info Assess. History Work Item History Systems at a Glance Cost Modifiers Attachments (1) Building Attributes

POC Name:
Phone: () - -
E-Mail:

Street:
City:
State: Zip:

Architect:
Contractor:
Documents:

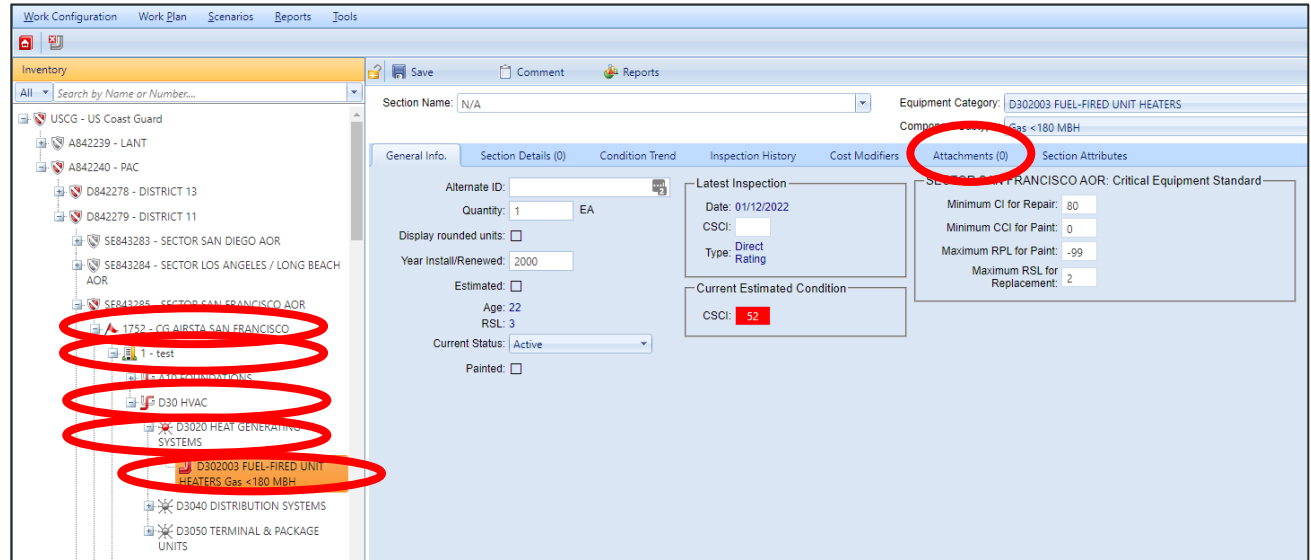
Building Dimensions

Building Perimeter: LF

Description	Length	Width
No records to display.		

Information Overload – Photos

- Site Level
- Complex Level
- Building Level
- System Level
- Component Level
- Section Level
- Section Details
- Inspection



Information Overload – Section Details

General Info.										Section Details (0)										Condition Trend										Inspection History										Cost Modifiers										Attachments (0)										Section Attributes									
General Info.										Section Details (0)										Condition Trend										Inspection History										Cost Modifiers										Attachments (0)										Section Attributes									
Attachments	ID Number	Eq. Type	Eq. Make	Serial No.	Model	Capacity	Manufacturer	Warranty Company	Warranty Date	Warranty Company 2	Warranty Date 2	Location	Date Manufactured	Control Type/Make	Year Installed	Sample Location	Comments	Refresh																																																			
No records to display.																																																																					

Information Overload – Catalog

Material/Equipment Category (Level IV)	Sub-Component Type (Pseudo Level V)	UoM	Replace Unit Cost	Design Life
B201001 EXTERIOR CLOSURE	Adobe	SF	8	75
B201001 EXTERIOR CLOSURE	Brick Veneer w/CMU Backup	SF	37	75
B201001 EXTERIOR CLOSURE	Brick Veneer w/Stud Backup	SF	32	75
B201001 EXTERIOR CLOSURE	Cement Boards / Panels	SF	30	30
B201001 EXTERIOR CLOSURE	CIP Concrete	SF	28	75
B201001 EXTERIOR CLOSURE	Concrete Block	SF	18	75
B201001 EXTERIOR CLOSURE	E.I.F.S.	SF	21	50
B201001 EXTERIOR CLOSURE	Fiber Cement Siding	SF	3	75
B201001 EXTERIOR CLOSURE	General	SF	26	30
B201001 EXTERIOR CLOSURE	Glass Block	SF	51	50
B201001 EXTERIOR CLOSURE	Gypsum	SF	2	50
B201001 EXTERIOR CLOSURE	Masonite	SF	30	75
B201001 EXTERIOR CLOSURE	Masonry Cavity	SF	36	75
B201001 EXTERIOR CLOSURE	Masonry Composite	SF	40	75
B201001 EXTERIOR CLOSURE	Metal Panel	SF	12	30
B201001 EXTERIOR CLOSURE	Metal Siding	SF	9	30
B201001 EXTERIOR CLOSURE	Other	SF	26	30
B201001 EXTERIOR CLOSURE	Precast Concrete Panel (Ribbed)	SF	60	75
B201001 EXTERIOR CLOSURE	Precast Concrete Panel (Tilt Up)	SF	14	75
B201001 EXTERIOR CLOSURE	Pre-Engineered Steel Wall and Panel	SF	19	60
B201001 EXTERIOR CLOSURE	Solid Brick - Double Wythe	SF	35	75
B201001 EXTERIOR CLOSURE	Solid Brick - Single Wythe	SF	23	75
B201001 EXTERIOR CLOSURE	Stone	SF	52	75
B201001 EXTERIOR CLOSURE	Stone Veneer w/CMU Backup	SF	55	75
B201001 EXTERIOR CLOSURE	Stone Veneer w/Stud Backup	SF	49	30
B201001 EXTERIOR CLOSURE	Stucco	SF	17	40
B201001 EXTERIOR CLOSURE	Tile Veneer w/CMU Backup	SF	49	75

Material/Equipment Category (Level IV)	Sub-Component Type (Pseudo Level V)	UoM	Replace Unit Cost	Design Life
D404001 SPRINKLERS AND RELEASING DEVICES	Deluge Systems	SF	8	75
D404001 SPRINKLERS AND RELEASING DEVICES	Deluge Systems - light hazard	SF	8	75
D404001 SPRINKLERS AND RELEASING DEVICES	Deluge Systems - ordinary hazard	SF	8	75
D404001 SPRINKLERS AND RELEASING DEVICES	Dry Pipe Systems	SF	7	75
D404001 SPRINKLERS AND RELEASING DEVICES	Dry Pipe Systems - extra hazard	SF	8	75
D404001 SPRINKLERS AND RELEASING DEVICES	Dry Pipe Systems - light hazard	SF	6	75
D404001 SPRINKLERS AND RELEASING DEVICES	Dry Pipe Systems - ordinary hazard	SF	6	75
D404001 SPRINKLERS AND RELEASING DEVICES	Preaction Systems	SF	7	75
D404001 SPRINKLERS AND RELEASING DEVICES	Preaction Systems - extra hazard	SF	8	75
D404001 SPRINKLERS AND RELEASING DEVICES	Preaction Systems - light hazard	SF	6	75
D404001 SPRINKLERS AND RELEASING DEVICES	Preaction Systems - ordinary hazard	SF	6	75
D404001 SPRINKLERS AND RELEASING DEVICES	Wet Pipe Systems	SF	7	75
D404001 SPRINKLERS AND RELEASING DEVICES	Wet Pipe Systems - extra hazard	SF	9	75
D404001 SPRINKLERS AND RELEASING DEVICES	Wet Pipe Systems - light hazard	SF	5	75
D404001 SPRINKLERS AND RELEASING DEVICES	Wet Pipe Systems - ordinary hazard	SF	6	75

But Wait, There's More

What inspection method?

- Age-Based Ratings
- Direct Ratings
- Distress Surveys

What should be included?

- Fire extinguishers
- Chalkboard
- Sidewalks

The “Ah-Ha” Moment

Make BUILDER work for you
instead of the other way
around



A large, semi-transparent gold banner spans across the middle of the image. The text "US Coast Guard" is centered on this banner in a white, bold, sans-serif font.

US Coast Guard

Coast Guard Case Study

Slash the catalog



Coast Guard Case Study

Slash the catalog

- C10 Interior Construction
- C30 Interior Finishes
- What's the goal?
- Maintaining the BUILDER database is a massive effort



C10 and C30

C107010 USCG INTERIOR CONSTRUCTION

Component Type	Design Life	UOM	Group	Major	Inventory Pic/Cmnt	Age Based	Sectioning
Low Density Interiors	50	SF	Y	N	Y	N	Location
Medium Density Interiors	50	SF	Y	N	Y	N	Location
High Density Interiors	50	SF	Y	N	Y	N	Location

C307010 USCG INTERIOR FINISHES

Component Type	Design Life	UOM	Group	Major	Inventory Pic/Cmnt	Age Based	Sectioning
Low End Finishes	20	SF	Y	N	Y	N	Location
Medium End Finishes	30	SF	Y	N	Y	N	Location
High End Finishes	50	SF	Y	N	Y	N	Location

How it Started; How it's Going (C10)

Complete Component Catalog Breakdown - C107010 INTERIOR CONSTRUCTION										Complete Component Catalog Breakdown - C107010 INTERIOR CONSTRUCTION										Complete Component Catalog Breakdown - C107010 INTERIOR CONSTRUCTION										Complete Component Catalog Breakdown - C107010 INTERIOR CONSTRUCTION										Complete Component Catalog Breakdown - C107010 INTERIOR CONSTRUCTION										Complete Component Catalog Breakdown - C107010 INTERIOR CONSTRUCTION									
<p>LOW DENSITY INTERIORS</p> <p>Component Type: Low Density Interiors</p> <p>Design UOM: 50 SF</p> <p>Group: Y</p> <p>Major: N</p> <p>Inventory: Y</p> <p>Phase: N</p> <p>Age: Y</p> <p>Sectioning: N</p> <p>Location: Location</p>																																																											
<p>MEDIUM DENSITY INTERIORS</p> <p>Component Type: Medium Density Interiors</p> <p>Design UOM: 50 SF</p> <p>Group: Y</p> <p>Major: N</p> <p>Inventory: Y</p> <p>Phase: N</p> <p>Age: Y</p> <p>Sectioning: N</p> <p>Location: Location</p>																																																											
<p>HIGH DENSITY INTERIORS</p> <p>Component Type: High Density Interiors</p> <p>Design UOM: 50 SF</p> <p>Group: Y</p> <p>Major: N</p> <p>Inventory: Y</p> <p>Phase: N</p> <p>Age: Y</p> <p>Sectioning: N</p> <p>Location: Location</p>																																																											

C107010 USCG INTERIOR CONSTRUCTION

Component Type	Design UOM	Group	Major	Inventory	Phase	Age	Sectioning	Location
Low Density Interiors	50 SF	Y	N	Y	N	Y	N	Location
Medium Density Interiors	50 SF	Y	N	Y	N	Y	N	Location
High Density Interiors	50 SF	Y	N	Y	N	Y	N	Location

Streamlining

Age-based ratings for most mechanical equipment

Inspection comments only when needed

Examples

Army Guide Comments

5 parts to every comment
Next person rule

Step 1: Understand the 5 parts of the inspection comment:

Part #	Part Type	Type Description
1	Front End	[First Last-AE-Date] OR [First Last-DPW-Date] (ex: [John Doe-AE-7/4/2017])
2	Distress	Identifies the distress of the component
3	Severity	Identifies the amount of the distress.
4	Location	Identifies the location of the distress
5	Quantity	Identifies the quantity of the distress

Step 2: Use the DCR of the component as the basis for the severity.

DCR	Severity
Amber (+)	Minor/Mild
Amber	Moderate
Amber (-)	Significant/Major
Red (+)	Extensive
Red	Severe
Red (-)	Complete/Total

To aid in the inspection comments reading correctly the severity can be modified slightly. For instance, 'moderately' can be used for an 'A' DCR comment. This approach also applies to the distresses where one of the 23 MUST be selected. If 'Cracked' is selected as the distress, the wording 'cracks' may be used.

Step 3: Identify the distress of the component:

23 Distresses			
Blistered	Displaced	Overheated	Capability/Capacity Deficient
Broken	Efflorescent	Patched	Animal/Insect Damaged
Clogged	Holes	Rotten	Moisture/Debris Contaminated
Corroded	Leaks	Stained/Dirty	Noise/Vibration Excessive
Damaged	Loose	Cracked	Operationally Impaired
Deteriorated	Missing		Electrical Ground Inadequate or Unintentional

Step 4: Location and Quantity

Location on non-dynamic assets - 'lobby area' or 'northwest corner'.

Quantity on a SF UOM will typically be a %. On an EA UOM will typically be a count.

Step 5: Put all 5 components together to form an inspection comment (colors correspond to part):

A+	Front End	CRACKED.	The	walls	have	minor	cracks	present	on	10% of the	gym.
A	Front End	DETERIORATION.	The	carpet	has	moderate	deterioration	over	50 %	of the	lobby.
A-	Front End	DAMAGED.	The	door	has	significant	damage	to the	lower half	of the	door.
R+	Front End	CRACKED.	The	windows	have	extensive	cracks	present	in	4	panes.
R	Front End	LEAKS.	The	roof	has	severe	leaking	around	the	HVAC	penetrations.
R-	Front End	OPERATIONALLY IMPAIRED.	The	3	north	doors	are	completely	operationally	impaired.	

The background of the slide is a photograph of a large, curved, modern building with a metallic, ribbed facade. The building curves away from the viewer towards the right, set against a sky with scattered white clouds. A horizontal brown banner is overlaid across the middle of the image, containing the title text.

Guam Military Housing

More Streamlining

Material Category	Component Type
B201001 EXTERIOR CLOSURE	Brick/Stone/Concrete
B201001 EXTERIOR CLOSURE	Siding/Stucco/EIFS
B301001 STEEP SLOPE ROOF SYSTEMS	Metal
B301001 STEEP SLOPE ROOF SYSTEMS	Shingles
B301001 STEEP SLOPE ROOF SYSTEMS	Tile/Slate
B301001 STEEP SLOPE ROOF SYSTEMS	Concrete
B301002 LOW SLOPE ROOF SYSTEMS	General

Material Category	Component Type
D303001 CHILLED WATER SYSTEMS	Chiller
D502002 LIGHTING EQUIPMENT	Exterior Lighting
D502002 LIGHTING EQUIPMENT	Interior Lighting
A102090 OTHER SPECIAL FOUNDATIONS	Foundation
A202001 BASEMENT WALL CONSTRUCTION	General
B107010 FRAME, FLOORS, AND ROOF	Building Frame, Floors, and Roof

Options – Rambo the Ratings

Remove the Direct Rating plusses and minuses

- Green, Amber, or Red

Age-base everything that looks Green

- Let BUILDER do the work if no visible distresses
- Assessment team focuses on finding problems

Documentation

Army Guide (725 pages) vs. USCG (111 pages) vs. Guam (44 pages)

D304001 AIR DISTRIBUTION, HEATING & COOLING ++

Component Type	Design Life	UOM	Group	Major	Inventory Pic/Cmnt	Age Based	Sectioning
General	20	EA	Y	Y	Y	Y	Location
Dehumidifier (12 Types) 1.5 - 1030 LB/HR, 50 - 40,000 CFM	10	EA	Y	Y	Y	Y	Location
Ductwork	40	SF	Y	N	N	Y	Building
Humidifier	10	EA	Y	Y	Y	Y	Location
VAV Terminal	30	EA	Y	N	N	Y	Location

Not for Everyone

What do you need?

What do you want to maintain in the database?

Know your goals

BUILDER loves data

Make BUILDER work for you



Thank You

Questions/Comments?