



JLG® BIM Content Library

User Guide – Boom Lifts



Figure 1: The JLG Boom Lift Family

LOADING THE MODELS

How to Load the Boom Lift Family

It is recommended the steps outlined below are followed to properly load the BIM component into a project.

1. Open a Revit Project File (.RVT) and navigate to the Plan View
2. Go to the 'Insert' tab on the Revit ribbon and select 'Load Family'

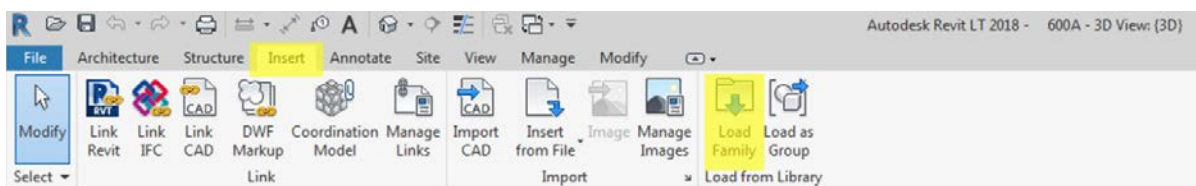


Figure 2: Loading the Family into a Project

3. Navigate to the location of the downloaded JLG® Boom Lift family component (RFA file)
4. Click 'OK' to load the component into the project

The family is now copied and embedded into the project. It can be selected from the components button located on the 'Architecture' tab on the main Revit Ribbon.



ACCESSING PRODUCT INFORMATION

How to Access the Data for the Boom Lift Family

To access the data embedded into the component, simply select the desired component and click the 'Edit Type' button at the head of the 'Properties' bar. This is typically located on the left-hand side of the screen.

All the product-specific information for the component selected is now displayed. From here, the component can be selected, as well as links to JLG.com to access documentation and product specifications

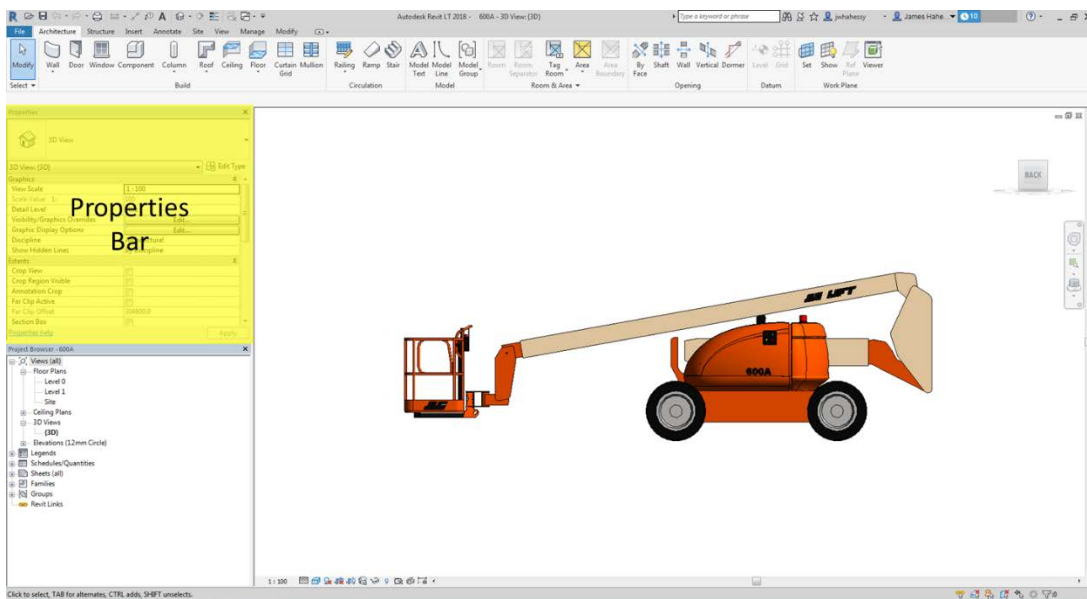


Figure 3: Accessing Additional Data

Type Properties	
Family:	JLG_450A2_Articulating_Boom_Lift
Type:	Height=20_Reach=20'
Type Parameters	
Parameter	Value
General	
Articulating All	4.913 m (16.28 ft)
Hydraulic Platform Rotator	180 Degrees
Platform Side Entry	30 x 72 in (0.76 x 1.83 m)
Rectangular on the Platform	110V JAC
Tilt Alarm/Indicator Light	3.0 Degrees
Data	
Auxiliary Power	12V DC
Axle Configuration	4 in, 20.31 cm
Diesel Engine	7.66 L (4.74 cu ft) Tier 4 Final 43 hp
Drive Speed	4.5 mph 7.24 km/hr
Dual Fuel Engine	GM Torque 3020 RHP1 82 hp 65 kW
Fuel Tank Capacity	28 gal 106 L
Gradeability	45%
Horizontal Outreach	25 ft 7.62 m
Id	1.81 in, 4.59 cm
Max Ground Bearing Pressure (With Pneumatic Tires)	40 psi 2.76 kg/cm ²
System Capacity	30 gal 113.7 L
Tank Capacity	30 gal 113.7 L
Tires Optional	12 x 38.5 Ings Tread Tires
Tires Standard	30 2350 x 16.5 Superwide
Turning Radius Outside	21 ft 6.40 m
Platform Capacity Unrestricted	1000 lb 453.6 kg
Platform Height	40 ft 12.19 m
Platform Rotator	180 Degrees Hydraulic
Platform Size	30 x 72 in 0.76 x 1.83 m
Range of Articulation	144 Degrees (-76, +69)
Towing	205 Degrees Non-Condensation
Turning Radius Inside	8 ft 2.44 m
Up and Over Height	26 ft 7.92 m
Weight	12,650 lb 5,738 kg
Other	

Figure 4: Additional Data for Model



USING THE MODELS

How to Use the Boom Lifts Component

All JLG[®] components have been created as mechanical models, once loaded the model can be placed anywhere within the project. When the component is in the desired location, the user should navigate to an appropriate elevation (plan view is advised). The align tool can then be used to lock the component to a specific location.

NOTE: While placing the component, it can be rotated by 90° by using the space key.

USING ADDITIONAL MODEL FEATURES

JLG[®] Boom Lifts components have been created parametrically. This allows the Height and Horizontal Reach of the platform; the Swing Angle, Platform Rotation and Jib Rotation to be changed. Tick-box options are also available for visibility control of the reach diagram, platform working area and turning radius.

Visibility Control

The visibility of the platform working area and turning radius can be toggled on or off. To access a component's visibility control, select the desired component and go to the 'Properties' bar. Then, simply uncheck the tick-box to control visibility.

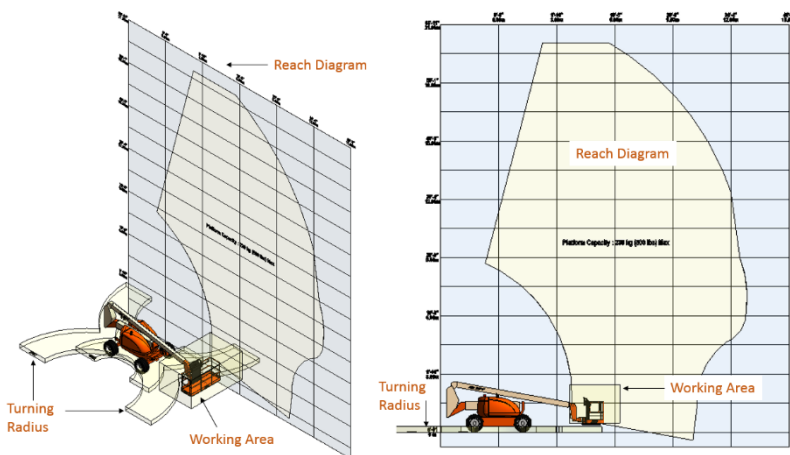


Figure 5: Illustration of Additional Visible Components

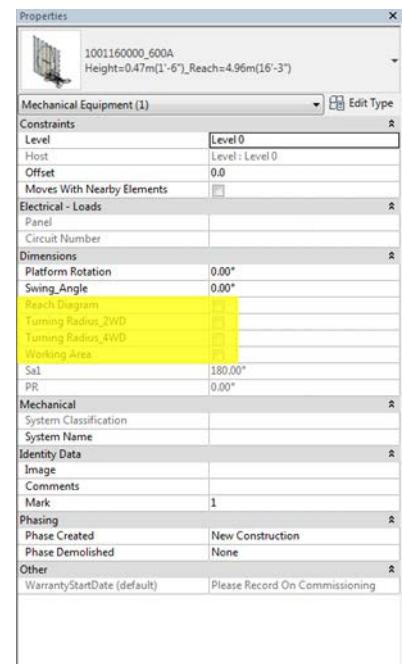


Figure 6: Visibility Control Tick-Boxes



Swing Angle, Platform Rotation & Jib Rotation

The Boom Swing Angle, Platform Rotation and Jib Rotation can be modified in the properties bar. Simply click in the box and type the desired value.

Note: Users can input any value into the controllable fields. However, if the capability of the JLG machine is exceeded the model will automatically update the value to reflect the maximum capacity of the machine.

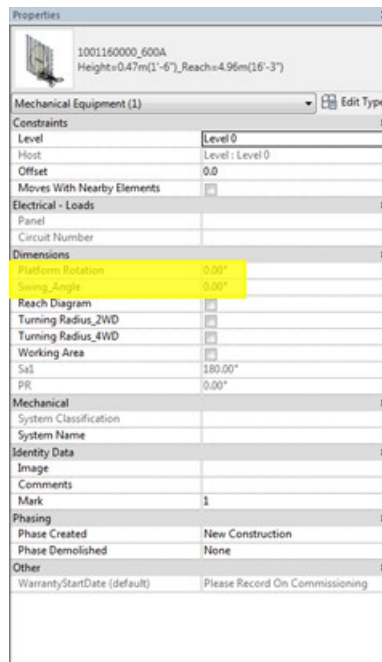


Figure 7: Rotation Configuration

Modify the Platform Height and Reach

To modify the height and reach of the platform simply select the component and choose from the pre-defined height and reach combinations in the types drop down box, this can be found at the top of the Properties bar. The platform will automatically move to the selected position.

Within the height and reach combinations, the user can select a 'Transport Condition/Stowed Position'. If selected the machine will move to its smallest and most suitable position for transportation.



Note: For types with the suffix (Platform Rotation 90°) the user must input '90' into the Platform Rotation parameter in the Properties bar. This will then give the correct height and reach.

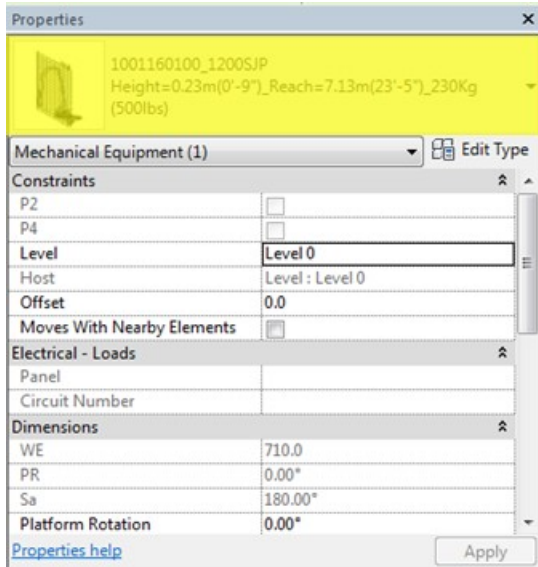


Figure 8: Height and Reach Control Menu

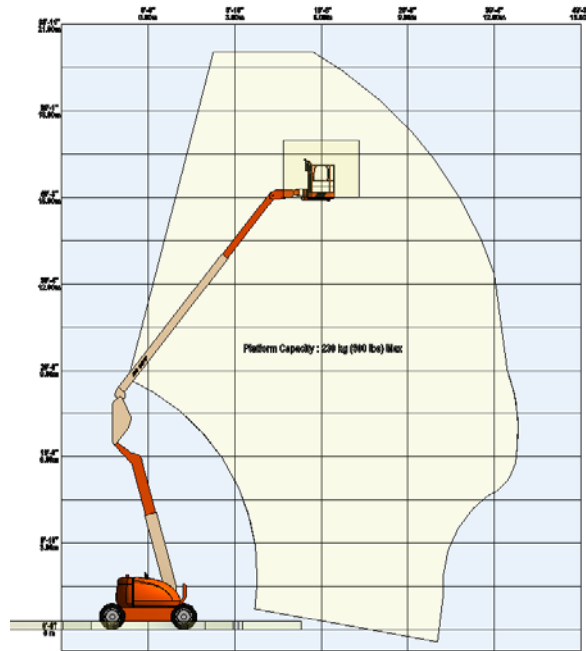


Figure 9: Each Height and Reach Option Corresponds to a Position in the Reach Diagram Grid

Family Types	
Type name:	Height=0.33m(1'-1")_Reach=3.80m(12'-6")
Search param	Height=0.33m(1'-1")_Reach=3.80m(12'-6")
	Height=1.50m(4'-11")_Reach=3.24m(10'-8")_(Platform Rotation 90°)
	Height=1.50m(4'-11")_Reach=4.50m(14'-9")
	Height=1.50m(4'-11")_Reach=5.53m(18'-2")
	Height=10.29m(33'-9")_Reach=1.02m(3'-4")
Constraints	
A1a	Height=10.29m(33'-9")_Reach=1.48m(4'-10")_(Platform Rotation 90°)
A2a	Height=3.00m(9'-10")_Reach=3.00m(9'-10")_(Platform Rotation 90°)
AE	Height=3.00m(9'-10")_Reach=4.50m(14'-9")
AEa	Height=3.00m(9'-10")_Reach=5.58m(18'-4")
AEa	Height=4.50m(14'-9")_Reach=1.56m(5'-1")_(Platform Rotation 90°)
AEa	Height=4.50m(14'-9")_Reach=3.00m(9'-10")
Ja	Height=4.50m(14'-9")_Reach=4.50m(14'-9")
Ja	Height=4.50m(14'-9")_Reach=5.69m(18'-8")
Reach	
Reach	Height=5.05m(16'-7")_Reach=0.63m(2'-1")_(Platform Rotation 90°)
Reach	Height=6.00m(19'-8")_Reach=0.79m(2'-7")_(Platform Rotation 90°)
Dimensions	
A1a1	Height=6.00m(19'-8")_Reach=1.50m(4'-11")
A2a1	Height=6.00m(19'-8")_Reach=3.00m(9'-10")
A2a1	Height=6.00m(19'-8")_Reach=4.50m(14'-9")
AEHa	Height=6.00m(19'-8")_Reach=5.57m(18'-3")
AEHa1	Height=7.50m(24'-7")_Reach=0.71m(2'-4")_(Platform Rotation 90°)
AEHa1	Height=7.50m(24'-7")_Reach=1.50m(4'-11")
AEa1	Height=7.50m(24'-7")_Reach=3.00m(9'-10")
AHa	Height=7.50m(24'-7")_Reach=4.50m(14'-9")
AHa1	Height=7.50m(24'-7")_Reach=5.09m(16'-8")
AHa1	Height=9.00m(29'-6")_Reach=0.61m(2'-0")_(Platform Rotation 90°)
JHa	Height=9.00m(29'-6")_Reach=1.50m(4'-11")
JHa1	Height=9.00m(29'-6")_Reach=3.00m(9'-10")
JHa1	Height=9.00m(29'-6")_Reach=3.95m(13'-0")
Ja1	Height=9.84m(32'-3")_Reach=2.68m(8'-9")

Figure 10: Examples of Height and Reach Combinations