



# Electric Vehicle Battery Production Facility

USA Mid-West 2024 Cost Basis

## Electric Vehicle Batteries

A number of major US-based automakers have committed billions of dollars in new CAPEX project funds in the last 12 to 24 months. These new projects will employ 1,000s of construction workers in the next couple of years: The following chart provides historical EPC benchmarks of some of these facilities:

EV Production Battery Facility Mid West - 2024 Cost Basis	SF Footprint
1 Story EV Battery Production Building Floor to Ceiling 28 feet	734,183
Office / Admin / Engineering 2 Story Building	72,614
Clean Warehouse Area & JIT Warehouse	91,746
Dispatch Area / Truckers Waiting Change Room Area	24,011
<b>Total Footprint Area</b>	<b>922,554</b>

#	Description	Qty	UoM	\$ Rate	Total
1	Siteworks - Site Clearance - Cut & Fill 75 Acres	75	AC		11,453,000
2	Roads, Parking Areas, Ponds, Fencing & Gatehouse	1	LS		32,498,800
3	Relocations / Demolitions	1	LS		1,058,900
4	New & Incoming Utilities	1	LS		17,701,400
5	Solar Farm / Utility Building / Cooling Towers	1	LS		18,757,890
6	Office / Engineering Building	72,614	SF	235	17,064,290
7	Sub assembly / JIT Warehouse	91,746	SF	169	15,505,074
8	EV Production Facility (Complete Building ) - Foundations, Structural Steel, Finishes, Siding, Roof, Polished Floor, Electrical & HVAC Scope, Cafeteria, Change Rooms & Control Area	743,183	SF	193	141,697,319
9	Mezz Floors / Platforms	135,760	SF	52	7,059,520
10	EV Battery Production Equipment (Material Intake / Conveyors / Bins / Hoppers, Mixers / Milling Equipment / Material Handling / Slurry Tanks - Battery Plate Assembly)	734,183	SF	338	248,153,854
11	Trucker Waiting & Changing Room Area	18,670	SF	125	2,333,750
12	Start Up / Commissioning				1,054,980
13	S/T				514,338,777
14	Project Management & Detailed Design 11.4%				58,634,621
15	Construction Management 7.3%				37,546,731
16	Owners' Project Management Oversight Team				774,960
17	Contingency / Management Reserve 20%				102,867,755
18	<b>Total</b>				<b>714,162,844</b>
19	Cost Per SF (Based on Total Area 922,554 SF)		SF	774	

Excludes A - Land purchase | B - Front End - Location Studies | C - Spare Parts | D - State Grants, Incentive, Training Levies & Tax Holidays



# US EV Battery Construction Benchmarks

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Other EV Battery Benchmarks: 2024 Cost Basis	\$ Cost / SF
New EV Facility USA South \$3.32 billion - 3,556,000 SF	934
Re-Cycle Facility USA Mid-West \$1.01 billion - 797,750 SF	1,266
New EV Facility USA Mid-West \$2.97 billion - 2,992,743 SF	992
New EV Facility Western USA \$4.35 billion - 4,860,000 SF	895
New EV Facility USA South \$2.02 billion - 3,040,000 SF	664

## Main Scope Item Range

Description	Low %	High %
Site Work / Parking & Incoming Utilities	4.2	5.6
Facility Shell (Foundations, Polished SOG, Structural Steel, Roof, & Exterior Envelop)	7.3	9.6
Facility Fit-Out (Offices, Conference Rooms, Break Rooms, Lunch Area, Toilets, Building Finishes)	7.6	10.1
Battery Production Equipment (Grippers, Mixers, Presses, Separators, Anodes, Cathodes, & All Other Production Equipment)	31.7	36.1
Mechanical Equipment – Piping / HVAC systems / HEPA Filters	11.3	14.1
Electrical / UPS Systems	11.5	15.2
Detailed Design PM / Construction Management Fees	10.2	12.2
Miscellaneous / Minor Scope	6.2	7.1
<b>Total (Low &amp; High Range)</b>	<b>90</b>	<b>110</b>



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If you have any questions or comments on the above cost model or would like more information on our International Construction Cost Databases please contact:

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