

# Neopor® GPS Energy Savings Guide for New Homes

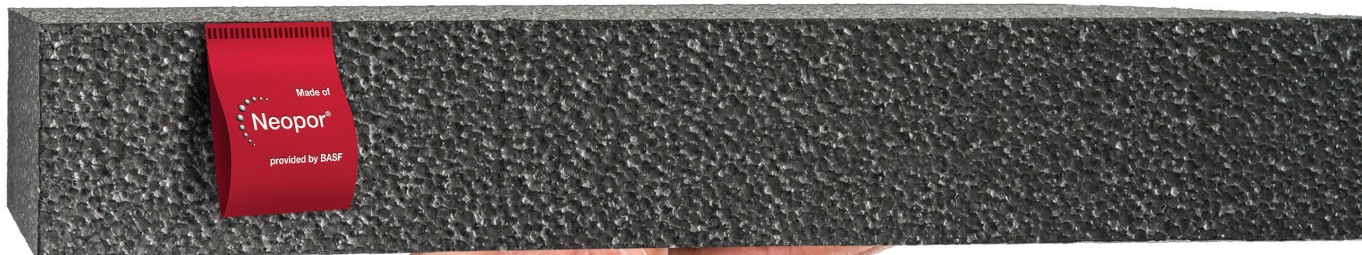
Insulated Vinyl Siding • Fanfold Underlayment • Continuous Insulation Sheathing

## Neopor® is Smart Insulation

BASF Neopor® GPS is a graphite polystyrene (GPS) rigid thermal foam insulation that gives builders maximum efficiency, cost-effectiveness and sustainability on construction projects. It's unique silver-gray color and exceptional insulation characteristics are a result of high-purity graphite that reflects and absorbs radiant energy, decreasing the materials thermal conductivity and increasing its R-value.

- Excellent insulation value of R-5 per inch enabling the use of thinner boards
- Exceptional moisture resistance with maximum water absorption by volume of less than 1%
- New polymeric flame retardant (PolyFR) with a better environmental profile

This means that Neopor® can result in serious annual energy savings for you when used as your preferred insulation material.



*Flip the page to learn the potential savings from using Neopor® Insulation*

New Homes

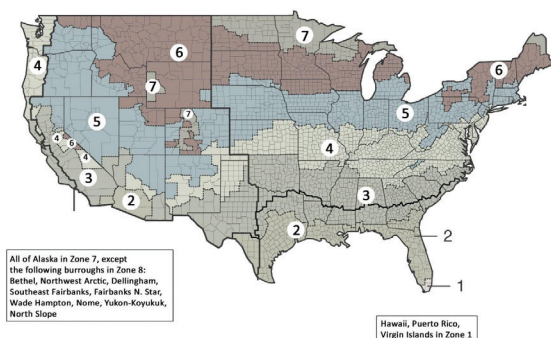
 **BASF**  
We create chemistry

## Neopor Potential Energy Savings Chart

You can determine the money **Neopor insulated vinyl siding, wall underlayment and insulated wall sheathing** will potentially save you on your annual energy bills by using the table to the right. Just follow these steps:

1. Find the city nearest to you in the first column.
2. Use the All Electric or Gas/Electric columns, depending on what type of energy your home uses.
3. Scan across to the thickness of Neopor that you will be using. This is your potential savings!

## U.S. Climate Zone Map



Source: U.S. Department of Energy

### Methodology

Energy and cost savings were determined using RESNET REM software (V14.6.1). New Home savings were based on the current IECC (International Energy Conservation Code) requirements in each state for building envelope and mechanical equipment construction. New Home potential annual savings were based on the current IECC (International Energy Conservation Code) requirements in each state for building envelope and mechanical equipment construction. U.S. Department of Energy data was used to determine the relevant climate zone as well as the heating and cooling degree days for each location. A representative 2200 ft<sup>2</sup>, 2-story home with 3-bedrooms, slab-on-grade, 2x4 walls, truss roof, and worst-case solar orientation was defined using U.S. Bureau of the Census and U.S. DOE Energy Information Administration data.

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State-MSA	Climate Zone	New Homes							
		Potential Annual Energy Savings based on Neopor Thickness (\$)							
		All Electric				Gas/Electric			
		1/4"	1/2"	3/4"	1"	1/4"	1/2"	3/4"	1"
AL-Birmingham	3	28	48	58	67	20	35	42	48
AK-Anchorage	7	116	192	231	263	48	81	98	112
AZ-Phoenix	2	20	35	43	48	21	36	44	50
AR-Little Rock	3	29	49	60	70	21	37	44	51
CA-Los Angeles	3	9	15	18	20	8	14	17	19
CA-San Diego	3	8	13	16	18	8	13	16	19
CA-San Francisco	3	15	26	31	35	14	23	28	32
CO-Denver	5	56	93	112	127	28	48	58	67
CT-Hartford	5	50	82	99	113	27	45	54	62
DE-Dover	4	42	70	84	97	25	41	51	58
FL-Miami	1	7	12	15	18	8	14	17	20
FL-Orlando	2	8	14	17	21	9	14	17	19
FL-Tampa	2	11	18	22	25	9	16	20	23
GA-Atlanta	3	28	48	58	67	20	34	42	47
HI-Honolulu	1	10	16	20	23	11	18	22	25
ID-Boise	6	48	82	100	115	27	47	56	64
IL-Chicago	5	62	103	124	141	29	49	59	68
IN-Indianapolis	5	52	86	103	118	27	46	55	62
IA-Des Moines	5	66	109	131	151	31	51	61	70
KS-Wichita	5	43	72	86	99	25	43	52	58
KY-Louisville	4	43	71	87	101	26	44	53	61
LA-New Orleans	2	17	29	35	41	15	25	31	36
ME-Portland	6	68	113	136	155	33	57	69	78
MD-Baltimore	4	38	63	76	87	23	39	47	54
MA-Boston	5	44	74	90	104	26	43	52	60
MI-Detroit	5	58	95	115	131	29	49	59	68
MN-Minneapolis	6	31	56	71	84	13	23	30	35
MS-Jackson	2	26	43	52	60	21	35	42	48
MO-St. Louis	4	51	85	103	119	28	49	59	67
MT-Billings	6	74	122	147	168	31	52	64	73
NE-Omaha	5	64	106	128	146	29	49	59	68
NV-Las Vegas	3	24	41	49	56	22	37	44	51
NH-Manchester	6	48	81	98	111	28	46	56	63
NJ-Trenton	5	40	66	80	92	24	40	48	55
NM-Albuquerque	4	41	68	83	95	27	45	55	64
NY-New York	4	44	76	92	105	28	47	57	66
NC-Charlotte	3	26	45	53	61	19	32	37	43
NC-Raleigh	4	27	45	54	63	17	27	34	38
ND-Fargo	7	115	190	228	260	41	69	83	96
OH-Cincinnati	5	41	70	85	97	25	41	50	57
OK-Oklahoma City	3	39	65	78	90	23	40	48	57
OR-Portland	5	29	48	58	67	21	35	43	49
PA-Philadelphia	4	44	76	94	108	29	49	59	68
RI-Providence	5	45	77	94	109	26	44	53	61
SC-Columbia	3	25	44	53	61	19	32	39	46
SD-Sioux Falls	6	91	151	182	207	36	60	73	84
TN-Nashville	4	36	62	76	87	24	40	49	55
TX-Dallas	3	51	45	79	63	64	35	84	49
TX-Austin	2	20	35	42	49	16	27	32	37
TX-Houston	3	19	32	39	45	14	24	30	34
TX-San Antonio	2	21	34	42	49	15	26	32	37
UT-Salt Lake City	5	48	81	99	113	28	47	58	66
VA-Charlottesville	4	30	51	62	70	17	29	35	40
VT-Burlington	6	28	51	63	75	13	23	29	34
DC-Washington	4	36	61	73	83	23	40	48	54
WA-Seattle	5	27	45	54	62	20	33	40	46
WV-Charleston	4	44	73	89	103	26	45	54	62
WI-Milwaukee	6	71	118	142	163	32	56	66	77
WY-Cheyenne	6	66	110	133	152	32	55	67	75

\* Please consider that annual savings potential varies with climate zone, heating degree days and also local energy code.