

Producing organisation: INSEE

- [Read the “Informations Rapides” related to this indicator.](#)

## Introduction

The building (BT) and civil engineering (TP) indices provide the cost of different activities in the construction sector, and are used mainly for contract indexing. The “all-trades” indices BT01, BT50 and TP01 are also used for statistical purposes. Until January 2014, when the October 2013 indices came out, [these series of indices](#) (pdf file) were published and calculated by the department of economy, evaluation, and integration of sustainable development in the Ministry of Ecology, Sustainable Development and Energy. Decree no. 2014-114 of 7 February 2014 concerning the national index in the building industry - all trades - and the circular of 21 February from the Ministry of the Economy and Finances NOR EFIS 1404646 C transferred this responsibility to INSEE. From February 2014, with the production of the November 2013 indices, the general methodology, weightings and the 1974 (BT) or 1975 (TP) reference for these indices have been retained, but the all basic indices now correspond to indices produced from public statistics for evolving calculations.

## Goals

**These indices can be used:**

- **By businesses and local authorities for contract indexing.**  
Businesses and local authorities can use these official indices for construction work bids, by selecting the activity that is closest to the subject of their bid. These “indices” consist of parametric formulae representing changes in costs for different inputs, as recommended in the guide *Le prix dans les marchés publics* (“Prices in public procurement”) published by the legal department of the Ministry of Economy and Finances in April 2013 (version 1.1). However, other better adapted parametric formulae are also permissible, such as using the “miscellaneous costs” and “transport” headings published under “various indices in the construction industry”;
- **By national accountants to deflate production in the construction sector from the structural statistics from businesses** and thus break down the figures into change in activity in volume (quantity, quality, effect of structure) and pure price change (“volume-price breakdown”). The “all-trades” indices, BT01, BT50 and TP01 complement the price index for the production of new housing for residential use (derived from the cost-of-construction index, which is in fact a price index) and the maintenance and improvements work price index;
- **By economists to assess and analyse business tendencies.**  
The BT01 index is particularly useful as an advance indicator for the reference price in the construction sector. Under two of its headings it provides data for the French response to the European regulation on short-term statistics (“STS” EC regulation no. [1165/98](#) of the Council of 19 May 1998, amended by EC regulation no. [1158/2005](#) of the Council of 6 July 2005) for variables 320 “construction costs”, 321 “material costs” and 322 “labour costs” from appendix B “Construction” of this regulation.

## Scope and list of BT and TP indices calculated

When they were first produced, the BT and TP indices were coordinated with the classification of activities and products at the time, NAP 73. Although subsequently they were not adjusted to the NAF and CPF classifications, they were listed thereafter by activity code in [NAF 2008](#) and [CPF 2008](#) to make it easier to select the correct index, using the explanatory notes on the classification that can be found on the INSEE website:

### List of BT indices

NAF / CPF, rev. 2 of 2008	Building Index	
<b>41.20</b>	BT01	All trade works
<b>43.12.12</b>	BT02	Earthworks
<b>43.21</b>	BT47	Electricity
<b>43.22.11</b>	BT38	Plumbing (including apparatus)
<b>43.22.12</b>	BT40	Central heating (excluding electrical heating)
	BT41	Ventilation and air conditioning
<b>43.29.19</b>	BT48	Elevators
<b>43.31</b>	BT08	Plaster and prefabricated plaster
<b>43.32A</b>	BT19a	Wooden joinery including external hardware, tropical wood stairs
	BT20a	Wooden joinery including external hardware; oak wood stairs
	BT18a	Wooden joinery including internal hardware including walls and flooring
	BT26	Plastic bay closing works including PVC window
	BT51	PVC joinery
<b>43.32B</b>	BT27	Aluminium bay window closing works
	BT28	Ferrous metals bay closing works
	BT42	Steel joinery and locksmiths
	BT43	Aluminium alloy joinery
<b>43.33.10</b>	BT09	Tile and ceramic
<b>43.33.21</b>	BT14	Coatings in cut natural stone plate and similar products
<b>43.33.29</b>	BT10	Plastic coatings
	BT11	Synthetic textile coatings
	BT12	Natural textile coatings
<b>43.34.10</b>	BT46	Painting, wall hanging, wall coverings
<b>43.34.20</b>	BT45	Glazing works-Mirror works
<b>43.91.11</b>	BT16a	Softwood timber frame
	BT17a	Oak wood frame
<b>43.91.19</b>	BT30	Schist slate roofing and accessories
	BT32	Baked clay tile roofing and accessories
	BT33	Concrete tile roofing and accessories
	BT34	Zinc and metal roofing and accessories (excluding copper)
	BT35	Asphalt shingles roofing and accessories
	BT49	Ribbed sheet steel roofing and cladding with waterproofing

		membrane
<b>43.99.10</b>	BT52	Exterior waterproofing coatings
	BT53	Asphalt sealing - multilayer
<b>43.99.40</b>	BT06	Framework, reinforced concrete structures
<b>43.99.50</b>	BT07	Framework and metal frames
<b>43.99.60</b>	BT03	Masonry and pipes (except frame, reinforced concrete, tiling, coatings and plastering) in concrete
<b>43</b>	BT50	Renovation-all trades maintenance

#### List of TP indices

NAF / CPF, rév. 2 de 2008	Civil Engineering Index	
<b>42 + 43.1</b>	TP01	All works general index
<b>42.11</b>	TP08	Roads and airfields with supplies
	TP08bis	Roads and airfields without supplies
	TP09	Road resurfacing works
	TP09bis	Road resurfacing works (manufacturing and implementation without supplies)
	TP09ter	Roads and airfields maintenance works
<b>42.13A</b>	TP02	Engineering works on land, river or sea site and special foundation works
<b>42.13B</b>	TP05a	Traditional underground works
	TP05b	Underground works in tunnel-boring machines
<b>42.21</b>	TP10a	Drains, sewers, sanitation and water supply works, pipes supplied
	TP10bis	Drains, sewers, sanitation and water supply works, pipes not supplied
	TP11	Long-distance pipelines and irrigation works, pipes supplied
<b>42.22</b>	TP12	Electrification networks
<b>42.91</b>	TP06	River dredging
	TP07b	Civil engineering works, concrete and steel for maritime works
	TP14	Underwater works in diving suits
<b>42.99</b>	TP13	Carpentry and metal engineering works
<b>43.12B</b>	TP03	General earthworks
<b>43.13Z</b>	TP04	Drilling and boring

## Technical characteristics

### Methodology

The building (BT) and civil engineering (TP) indices give the costs of the different activities in the construction sector, derived from 6 line-items in an analytical accounting process: “cost of labour”, previously called “wages and charges”, “materials”, “assets”, “energy”, “transport”, “miscellaneous costs”; these are similar to the “KLEMST” approach used by economists in relation to productivity (where  $K$  = capital for “assets”,  $L$  = labour,  $E$  = energy,  $M$  = materials,  $S$  = services for “miscellaneous costs”,  $T$  = transport).

The links between the items in the indices and the lines in the general accounting plan are as follows, given that subcontracting has been removed from production, the heading “miscellaneous costs” has been capped, and only costs that can be linked to a specific construction site are assumed to be taken into account :

<b>Items</b>	<b>General financial accounting</b>	
<b>K Capital</b>	605	Purchase of capital assets, equipment and work
	606 \ 6061	Purchases not stored (small items)
	612 \ partial	Leasing excluding transport equipment
	6131 \ partial	Equipment hire excluding transport equipment
	615 \ partial	Maintenance and repairs excluding transport equipment
	68 \ partial	Depreciation and amortisation of fixed assets excluding transport equipment
<b>L Labour</b>	604	Purchases of services
	621	Temporary staff
	6311	Payroll tax
	64	Personnel expenses
<b>E Energy</b>	60221 \ partial	Combustibles excluding fuels
	6061	Non-stockable supplies (water, energy, electricity)
<b>M Materials</b>	601	Stored purchases
	602 \ 60221	Other supplies
	609	Rebates and allowances on purchases
<b>S Services (miscellaneous costs)</b>	61	External services minus 611 “general subcontracting”, minus 612 “leasing”, minus 6131 “Equipment hire”, minus 615 “maintenance and repairs”, minus 6163 “transport insurance”
	622	Remuneration of intermediaries and professional fees
	623	Advertising, public relations
	625	Travel and entertaining
	626	Postal and telecommunication charges
	68 \ partial	Depreciation and amortisation of fixed assets
<b>T Transport</b>	60221 \ partial	Fuel
	Part of 612	Leasing transport equipment
	Part of 6135	Hire of trucks without drivers
	Part of 6155	Maintenance and repair of transport equipment
	6163	Transport insurance
	624	Transport of goods and employee transport
	68 \ partial	Depreciation and amortisation of transport equipment

Each item consists of basic indices, from now on all derived from public statistics.

The weightings for the items and the basic indices that make up the items are fixed for the duration of the base.

### **Aggregation and reference**

Items are calculated using a chained Lowe aggregation technique: change in an item is a weighted mean of changes in the basic indices that make up the item.

Although the structure and weighting of the BT and TP indices have been revised periodically, the BT indices are still expressed with reference to 1974, and the TP with reference to 1975.

## Weightings

The tables for which the links are provided below give the weightings for the different indices according to each item and within the materials budget item for the BT indices:

### Weighting of Building indices, item by item

Weightings (in %)

Index		Items						
		Cost of labour	Equipment	Transport	Energy	Misc. costs	Materials	Total
BT01	All trade works	43	4	3	3	15	32	100
BT02	Earthworks	36	36	0	10	18	0	100
BT03	Masonry and pipes (except frame, reinforced concrete, tiling, coatings and plastering) in concrete	55	7	2	2	11	23	100
BT06	Framework, reinforced concrete structures	47	8	3	1	13	28	100
BT07	Framework and metal frames	42	6	2	3	6	41	100
BT08	Plaster and prefabricated plaster	50	3	2	0	10	35	100
BT09	Tile and ceramic	45	3	2	0	10	40	100
BT10	Plastic coatings	35	3	2	0	10	50	100
BT11	Synthetic textile coatings	30	3	2	0	10	55	100
BT12	Natural textile coatings	10	3	2	0	10	75	100
BT14	Coatings in cut natural stone plate and similar products	44	3	4	0	10	39	100
BT16a	Softwood timber frame	37	4	5	0	11	43	100
BT17a	Oak wood frame	45	3	3	0	11	38	100
BT18a	Wooden joinery including internal hardware including walls and flooring	47	4	3	0	17	29	100
BT19a	Wooden joinery including external hardware, tropical wood stairs	48	4	3	0	18	27	100
BT20a	Wooden joinery including external hardware; oak wood stairs	48	4	3	0	18	27	100

BT26	Plastic bay closing works including PVC window	41	3	2	0	7	47	100
BT27	Aluminium bay window closing works	38	4	2	0	8	48	100
BT28	Ferrous metals bay closing works	43	4	2	0	8	43	100
BT30	Schist slate roofing and accessories	40	3	4	0	13	40	100
BT32	Baked clay tile roofing and accessories	40	3	4	0	13	40	100
BT33	Concrete tile roofing and accessories	40	3	4	0	13	40	100
BT34	Zinc and metal roofing and accessories (excluding copper)	40	3	4	0	13	40	100
BT35	Asphalt shingles roofing and accessories	40	3	4	0	13	40	100
BT38	Plumbing (including apparatus)	42	3	3	0	12	40	100
BT40	Central heating (excluding electrical heating)	40	2	2	0	15	41	100
BT41	Ventilation and air conditioning	35	2	2	0	15	46	100
BT42	Steel joinery and locksmiths	42	3	2	1	12	40	100
BT43	Aluminium alloy joinery	42	5	3	0	7	43	100
BT45	Glazing works-Mirror works	35	3	4	0	10	48	100
BT46	Painting, wall hanging, wall coverings	58	3	0	0	12	27	100
BT47	Electricity	45	2	0	0	14	39	100
BT48	Elevators	60	3	2	0	10	25	100
BT49	Ribbed sheet steel roofing and cladding with waterproofing membrane	35	5	4	3	12	41	100
BT50	Renovation-all trades maintenance	58	4	3	2	15	18	100
BT51	PVC joinery	27	2	2	0	7	62	100
BT52	Exterior waterproofing coatings	54	3	3	3	3	34	100
BT53	Asphalt sealing - multilayer	36	5	3	3	10	43	100

## Weighting of Civil Engineering indices, item by item

Weightings (in %)

Index		Items						
		Cost of labour	Equipment	Transport	Energy	Misc. costs	Materials	Total
TP01	All works general index	44	18	4	6	6	22	100
TP02	Engineering works on land, river or sea site and special foundation works	55	18	1	3	3	20	100
TP03	General earthworks	40	25	5	7	3	20	100
TP04	Drilling and boring	46	23	3	5	3	20	100
TP05a	Traditional underground works	53	20	3	2	9	13	100
TP05b	Underground works in tunnel-boring machines	33	20	7	6	8	26	100
TP06	River dredging	45	30	0	20	5	0	100
TP07b	Civil engineering works, concrete and steel for maritime works	20	13	2	3	5	57	100
TP08	Roads and airfields with supplies	35	12	12	8	8	25	100
TP08bis	Roads and airfields without supplies	49	23	1	12	15	0	100
TP09	Road resurfacing works	24	9	12	9	7	39	100
TP09bis	Road resurfacing works (manufacturing and implementation without supplies)	43	30	0	17	10	0	100
TP09ter	Roads and airfields maintenance works	65	20	0	5	10	0	100
TP10-a	Drains, sewers, sanitation and water supply works, pipes supplied	41	15	4	3	3	34	100
TP10bis	Drains, sewers, sanitation and water supply works, pipes not supplied	51	18	4	4	5	18	100
TP11	Long-distance pipelines and irrigation works, pipes supplied	22	8	2	2	5	61	100

TP12	Electrification networks	51	15	6	3	7	18	100
TP13	Carpentry and metal engineering works	45	6	2	3	10	34	100
TP14	Underwater works in diving suits	50	25	5	5	5	10	100

- See pdf file: Note methodologique-Structure du poste Matériaux des Index BT-base1974
- See pdf file : Note methodologique-Structure des Index TP.-base1975.

## Information sources

The item “wages and charges” is now made up from the hourly labour cost index in the construction sector, produced by INSEE, with a lag of 3 months.

The basic indices for the other items are made up for the most part from producer price indices, and in particular the [Producer price indices of French industry for the French market \(base 2010\) - Purchaser's price for contract escalation](#), produced by INSEE.

All the other indices are derived from public statistics.

## Statistical units

The BT and TP indices do not give rise to a new survey; they use existing public statistics, and especially the [OPISE](#) survey, to make up the basic indices. Conceptually, the unit observed in relation to costs is a branch, or a sub-branch, of activity in French construction companies.

## Frequency of survey

Monthly.

## Dissemination

The BT and TP indices are disseminated on the last working day of each month, at m+90, on the [Macro-economic database \(BDM\)](#) website page, under the topic “Prices and price indices”, heading “Production and import price indices”, sub-heading “Construction producer price and costs indices” then “Producer cost indices for construction (contract escalation)”. They are also published in the *Journal Officiel* on the last day of the month. These indices are never revised.