

# **NOTA TEKNIKAL**

# **TECHNICAL NOTES**



## TECHNICAL NOTES

- 1. Introduction** *The Quarterly Construction Survey is conducted based on project approach starting from the first quarter 2006. This survey covers only main contractors who are awarded with the projects. The value of work done reported by these main contractors is the value of work done irrespective of whether the main contractor or the sub-contractor did the work. Since projects are only awarded to the main contractors, it eliminates the inclusion of sub-contractors in the survey which may create an element of double counting in the compilation of data.*
- 2. Objective** *The main objective of the Quarterly Construction Survey is to collect and compile data on the value of work done to publish Quarterly Construction Statistics. Furthermore, the findings of the survey are used in the compilation of Gross Domestic Product (GDP) as well as assisting government in economic planning and policy formulation. The data can also be used by the private sector and individuals for economic analysis.*
- 3. Legal authority** *The survey was conducted under the provisions of the **Statistics Act, 1965 (Revised 1989)**. Section 5 of this Act requires all establishments operating in Malaysia to provide actual information or best estimates to the Department. The Act stipulates that the contents of individual returns are **confidential** and only aggregated figures are published.*
- 4. Scope and coverage** *The Quarterly Construction Survey covers all main contractors with value of projects worth RM500,000 and above registered with the Construction Industry Development Board (CIDB). The survey coverage consist of 72 construction industries classified according to the Malaysian Standard Industrial Classification (MSIC) 2008. Construction activities related to oil and gas explorations are not covered in this survey. A complete list of the industries covered are shown in the Appendix.*
- 5. Method of collection** *The survey is conducted using mail questionnaire. The respondents are given two weeks to complete and return the questionnaire to the Department. After the said period, field visits are conducted to obtain response from the establishments which have not returned the questionnaires. As for non-response, the value of work done will be estimated using an appropriate statistical method. The response rate at the close of the survey was above 90 per cent.*
- 6. Main contractor** *Main contractor is a person, firm, etc. that accepts responsibility for completing the entire construction job. A contract is entered into with the owner of the project for the contractor to complete a certain type of construction work according to the specifications laid down in the contract. A main contractor may do all or sub-contract the whole or part of the project to one or more sub-contractors. However, the main contractor is responsible to see the whole work is done to the satisfaction of the project owner.*

## TECHNICAL NOTES (CONT'D.)

- 7. Reporting unit** The reporting unit of this survey is the main contractor. This unit reports on the work status of each of its construction project.
- 8. Location of project** Location of project refers to the state where the project is being carried out.
- 9. Value of work done** The value of work done includes new construction, major repairs, repairs, renovations and repairs and current maintenance carried out during the reference period for the project owner or investor.
- 10. Type of construction activity** The type of construction category used in the publication follows the MSIC 2008 ver. 1.0 :-
- Residential buildings (41001)
- Non-residential buildings (41002)
- Codes 41003 and 41009 are classified under the residential or non-residential buildings based on the types of activity carried out
- Civil engineering (42101-42106, 42109, 42201-42207, 42209, 42901-42906, 42909)
- Specialized construction activities (Special trade) (43110, 43121-43126, 43129, 43211-43216, 43219, 43221-43229, 43291-43295, 43299, 43301-43307, 43309, 43901-43907, 43909)
- 11. Public corporation** The public corporation is set up under the laws passed by the Parliament Act or the State Legislative Assembly. It enables the government to be involved directly in the socio-economic development of the country. It consists of statutory bodies and non-statutory bodies which can operate and manage the government programs more independently. Examples of public corporations are Tenaga Nasional Berhad, Telekom Malaysia Berhad, Keretapi Tanah Melayu Berhad, etc.
- 12. Rounding** The sum of components may not add up to the total in the tables presented in this publication due to rounding.

## TECHNICAL NOTES (CONT'D.)

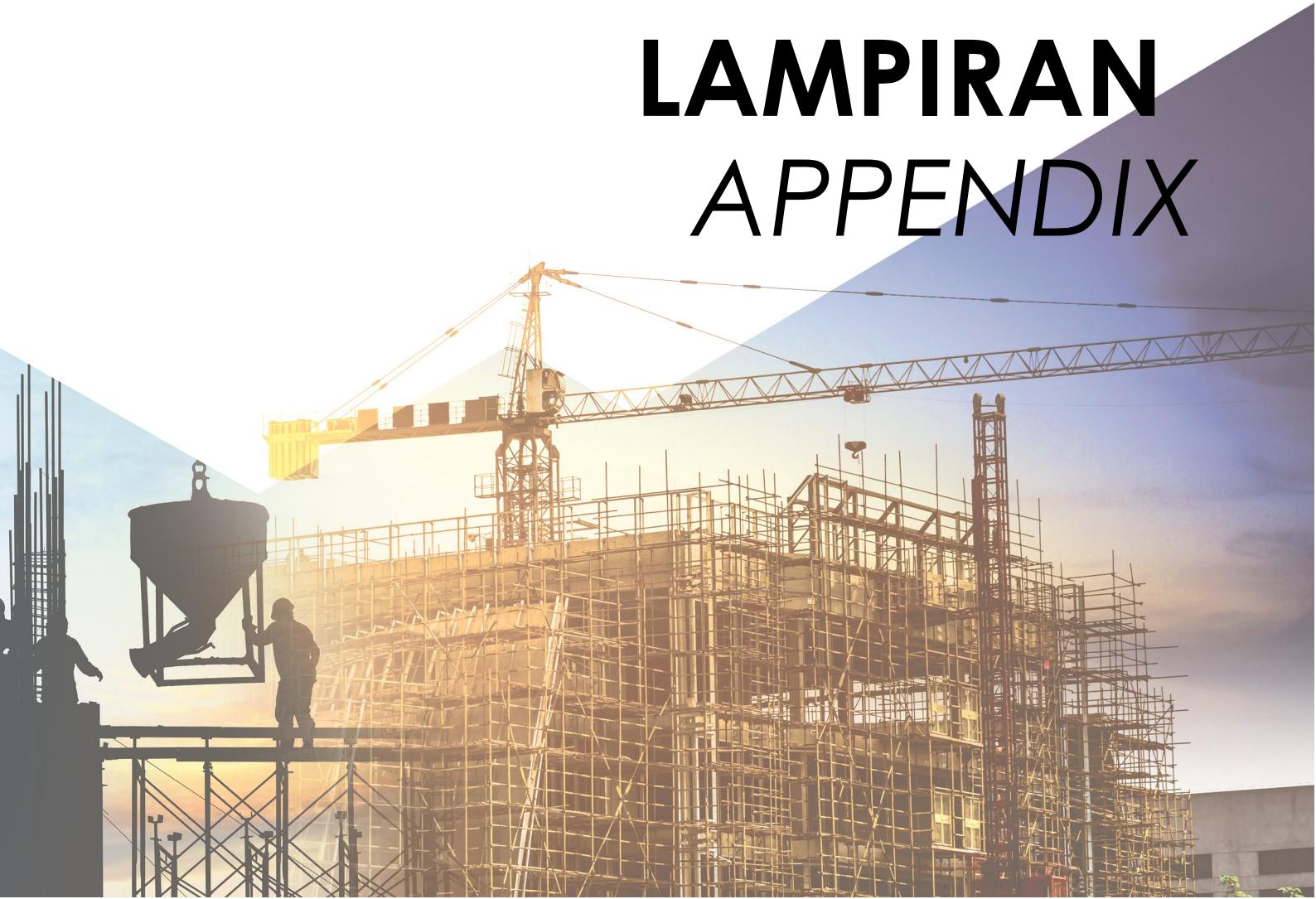
**13. Symbols and notations** The following symbols and notations were used in the publication:-

QoQ	<i>Quarter on quarter</i>
YoY	<i>Year on year</i>
-	<i>Not available</i>
No.	<i>Number</i>
RM	<i>Ringgit Malaysia</i>
Q	<i>Quarter</i>
n.e.c.	<i>Not elsewhere classified</i>
b	<i>Billion</i>

**PIAWAIAN KLASIFIKASI INDUSTRI MALAYSIA 2008  
Ver. 1.0 (SEKSYEN F: PEMBINAAN)**

*MALAYSIA STANDARD INDUSTRIAL CLASSIFICATION 2008  
Ver. 1.0 (SECTION F: CONSTRUCTION)*

**LAMPIRAN  
APPENDIX**



## LAMPIRAN / APPENDIX

**PIAWAIAN KLASIFIKASI INDUSTRI MALAYSIA 2008 Ver. 1.0  
(SEKSYEN F : PEMBINAAN)**  
**MALAYSIA STANDARD INDUSTRIAL CLASSIFICATION 2008 Ver. 1.0  
(SECTION F : CONSTRUCTION)**

KOD INDUSTRI INDUSTRY CODE	PENERANGAN DESCRIPTION
<b>BANGUNAN KEDIAMAN / BANGUNAN BUKAN KEDIAMAN RESIDENTIAL BUILDINGS / NON-RESIDENTIAL BUILDINGS</b>	
<b>4100</b>	<b>Pembinaan bangunan</b> <i>Construction of buildings</i>
41001	: <b>Bangunan kediamaan</b> <i>Residential buildings</i>
41002	: <b>Bangunan bukan kediamaan</b> <i>Non-residential buildings</i>
41003	: <b>Pemasangan dan pendirian bangunan pasang siap di tapak pembinaan</b> <i>Assembly and erection of prefabricated constructions on the site</i>
41009	: <b>Pembinaan bangunan t.t.t.l.</b> <i>Construction of buildings n.e.c.</i>
<b>KEJURUTERAAN AWAM CIVIL ENGINEERING</b>	
<b>4210</b>	<b>Pembinaan jalan raya dan landasan kereta api</b> <i>Construction of roads and railways</i>
42101	: <b>Pembinaan laluan kenderaan bermotor, lorong, jalan, laluan pejalan kaki dan kenderaan lain</b> <i>Construction of motorways, streets, roads, other vehicular and pedestrian ways</i>
42102	: <b>Kerja penurapan jalan, jalan raya, lebuhraya, jambatan atau terowong</b> <i>Surface work on streets, roads, highways, bridges or tunnels</i>
42103	: <b>Pembinaan jambatan termasuk untuk lebuhraya bertenagak</b> <i>Construction of bridges, including those for elevated highways</i>
42104	: <b>Pembinaan terowong</b> <i>Construction of tunnels</i>
42105	: <b>Pembinaan landasan keretapi dan laluan bawah tanah</b> <i>Construction of railways and subways</i>
42106	: <b>Pembinaan landasan lapangan terbang</b> <i>Construction of airfield/airports runways</i>
42109	: <b>Pembinaan jalan raya dan landasan keretapi t.t.t.l.</b> <i>Construction of roads and railways n.e.c.</i>
<b>4220</b>	<b>Pembinaan projek utiliti</b> <i>Construction of utility projects</i>
42201	: <b>Saluran paip jarak jauh, talian komunikasi dan kuasa</b> <i>Long-distance pipelines, communication and power lines</i>

## LAMPIRAN / APPENDIX (SAMB. / CONT'D.)

KOD INDUSTRI INDUSTRY CODE	PENERANGAN DESCRIPTION
42202 :	<b>Saluran paip dalam bandar, talian komunikasi dan kuasa dalam bandar, kerja-kerja berkaitan dalam bandar</b> <i>Urban pipelines, urban communication and power lines; ancillary urban works</i>
42203 :	<b>Pembinaan punca dan saluran air</b> <i>Water main and line construction</i>
42204 :	<b>Loji takungan</b> <i>Reservoirs</i>
42205 :	<b>Pembinaan sistem pengairan (terusan)</b> <i>Construction of irrigation systems (canals)</i>
42206 :	<b>Pembinaan sistem pembetungan (termasuk pembaikan) dan loji pelupusan sisa kumbahan</b> <i>Construction of sewer systems (including repair) and sewage disposal plants</i>
42207 :	<b>Pembinaan janakuasa</b> <i>Construction of power plants</i>
42209 :	<b>Pembinaan projek utiliti t.t.t.l.</b> <i>Construction of utility projects n.e.c</i>
4290	<b>Pembinaan projek kejuruteraan awam lain, kecuali bangunan</b> <i>Construction of other civil engineering projects, except buildings</i>
42901 :	<b>Pembinaan loji penapisan</b> <i>Construction of refineries</i>
42902 :	<b>Pembinaan laluan air, kerja pelabuhan dan sungai, pleasure ports (marinas), kunci air</b> <i>Construction of waterways, harbour and river works, pleasure ports (marinas), locks</i>
42903 :	<b>Pembinaan empangan dan daik</b> <i>Construction of dams and dykes</i>
42904 :	<b>Penggalian laluan air</b> <i>Dredging of waterways</i>
42905 :	<b>Kemudahan sukan luar dewan</b> <i>Outdoor sports facilities</i>
42906 :	<b>Pembahagian tanah beserta dengan penambahbaikan tanah</b> <i>Land subdivision with land improvement</i>
42909 :	<b>Pembinaan projek kejuruteraan awam lain t.t.t.l.</b> <i>Construction of other engineering projects n.e.c.</i>

## LAMPIRAN / APPENDIX (SAMB. / CONT'D.)

KOD INDUSTRI INDUSTRY CODE	PENERANGAN DESCRIPTION
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PERTUKANGAN KHAS SPECIAL TRADES	
<b>4311</b>	<b>Perobohan / Demolition</b>
43110 :	<b>Perobohan atau peranapan bangunan dan struktur lain</b> <i>Demolition or wrecking of buildings and other structures</i>
<b>4312</b>	<b>Penyediaan tapak</b> <i>Sites preparation</i>
43121 :	<b>Pembersihan tapak bangunan</b> <i>Clearing of building sites</i>
43122 :	<b>Pengalihan tanah</b> <i>Earth moving</i>
43123 :	<b>Pengujian tanah, pengerudian dan penggalian tanah untuk tujuan pembinaan, geofizikal,geologikal atau tujuan seumpamanya</b> <i>Drilling, boring and core sampling for construction, geophysical, geological or similar purposes</i>
43124 :	<b>Penyediaan tapak bagi perlombongan</b> <i>Site preparation for mining</i>
43125 :	<b>Perparitan bagi tanah pertanian atau perhutanan</b> <i>Drainage of agricultural or forestry land</i>
43126 :	<b>Kerja penebusgunaan tanah</b> <i>Land reclamation work</i>
43129 :	<b>Aktiviti penyediaan tapak lain t.t.t.l.</b> <i>Other site preparation activities n.e.c.</i>
<b>4321</b>	<b>Pemasangan elektrik</b> <i>Electrical installation</i>
43211 :	<b>Pendawaian dan pemasangan elektrik</b> <i>Electrical wiring and fittings</i>
43212 :	<b>Pendawaian telekomunikasi</b> <i>Telecommunications wiring</i>
43213 :	<b>Pendawaian rangkaian komputer dan kabel televisyen</b> <i>Computer network and cable television wiring</i>
43214 :	<b>Piring satelit</b> <i>Satellite dishes</i>
43215 :	<b>Sistem pencahayaan</b> <i>Lighting systems</i>

## LAMPIRAN / APPENDIX (SAMB. / CONT'D.)

KOD INDUSTRI INDUSTRY CODE	PENERANGAN DESCRIPTION
43216 :	<b>Sistem keselamatan</b> <i>Security systems</i>
43219 :	<b>Pemasangan elektrik t.t.t.l.</b> <i>Electrical installation n.e.c.</i>
<b>4322</b>	<b>Pemasangan sistem paip, pemanasan dan pendinginan udara</b> <i>Plumbing, heat and air-conditioning installation</i>
43221 :	<b>Pemasangan sistem pemanasan (elektrik, gas dan minyak)</b> <i>Installation of heating systems (electric, gas and oil)</i>
43222 :	<b>Pemasangan relau, menara pendinginan</b> <i>Installation of furnaces, cooling towers</i>
43223 :	<b>Pemasangan pengumpul tenaga solar bukan elektrik</b> <i>Installation of non-electric solar energy collectors</i>
43224 :	<b>Pemasangan sistem paip dan peralatan sanitasi</b> <i>Installation of plumbing and sanitary equipment</i>
43225 :	<b>Pemasangan peralatan dan saluran pengudaraan, penyejukan atau pendinginan udara</b> <i>Installation of ventilation, refrigeration or air-conditioning equipment and ducts</i>
43226 :	<b>Pemasangan kelengkapan gas</b> <i>Installation of gas fittings</i>
43227 :	<b>Pemasangan sistem perenjis air untuk kebakaran dan padang</b> <i>Installation of fire and lawn sprinkler systems</i>
43228 :	<b>Pemasangan paip untuk wap</b> <i>Steam piping</i>
43229 :	<b>Pemasangan sistem paip, pemanasan dan pendinginan udara t.t.t.l.</b> <i>Plumbing, heat and air-conditioning installation n.e.c.</i>
<b>4329</b>	<b>Pemasangan pembinaan lain</b> <i>Other construction installation</i>
43291 :	<b>Pemasangan lif, eskalator dalam bangunan atau projek pembinaan lain</b> <i>Installation of elevators, escalators in buildings or other construction projects</i>
43292 :	<b>Pemasangan pintu automatik dan berputar dalam bangunan atau projek pembinaan lain</b> <i>Installation of automated and revolving doors in buildings or other construction projects</i>
43293 :	<b>Pemasangan konduktor kilat dalam bangunan atau projek pembinaan lain</b> <i>Installation of lightning conductors in buildings or other construction projects</i>

## LAMPIRAN / APPENDIX (SAMB. / CONT'D.)

KOD INDUSTRI INDUSTRY CODE	PENERANGAN DESCRIPTION
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43294 :	<b>Pemasangan sistem pembersihan vakum dalam bangunan atau projek pembinaan lain</b> <i>Installation vacuum cleaning systems in buildings or other construction projects</i>
43295 :	<b>Pemasangan sistem penebatan haba, bunyi atau gegaran dalam bangunan atau projek pembinaan lain</b> <i>Installation thermal, sound or vibration insulation in buildings or other construction projects</i>
43299 :	<b>Pemasangan pembinaan lain t.t.t.l.</b> <i>Other construction installation n.e.c.</i>
4330	<b>Penyiapan dan kemasan bangunan</b> <i>Building completion and finishing</i>
43301 :	<b>Pemasangan rangka pintu, tingkap, rangka/bingkai pintu dan tingkap daripada kayu atau bahan lain, dapur pasang siap, tangga, kelengkapan kedai dan perabot</b> <i>Installation of doors, windows, door and window frames of wood or other materials, fitted kitchens, staircases, shop fittings and furniture</i>
43302 :	<b>Melapis, memasang jubin, menggantung atau memasang kelengkapan bangunan atau projek pembinaan lain daripada pelbagai bahan</b> <i>Laying, tiling, hanging or fitting in buildings or other construction projects of various types of materials</i>
43303 :	<b>Mengecat dalam dan luar bangunan</b> <i>Interior and exterior painting of buildings</i>
43304 :	<b>Mengecat struktur kejuruteraan awam</b> <i>Painting of civil engineering structures</i>
43305 :	<b>Pemasangan kaca, cermin</b> <i>Installation of glass, mirrors</i>
43306 :	<b>Penyiapan dalaman bangunan</b> <i>Interior completion</i>
43307 :	<b>Pembersihan bangunan baru selepas kerja pembinaan</b> <i>Cleaning of new buildings after construction</i>
43309 :	<b>Penyiapan dan kemasan bangunan lain t.t.t.l.</b> <i>Other building completion and finishing work n.e.c.</i>

## LAMPIRAN / APPENDIX (SAMB. / CONT'D.)

KOD INDUSTRI INDUSTRY CODE	PENERANGAN DESCRIPTION
4390	<b>Aktiviti pembinaan pertukangan khas lain</b> <i>Other specialized construction activities</i>
43901 :	<b>Pembinaan tapak, termasuk memantak cerucuk</b> <i>Construction of foundations, including pile driving</i>
43902 :	<b>Pembinaan elemen keluli yang bukan dibuat sendiri</b> <i>Erection of non-self-manufactured steel elements</i>
43903 :	<b>Memasang dan membuka semula perancah dan platform kerja</b> <i>Scaffolds and work platform erecting and dismantling</i>
43904 :	<b>Kerja mengikat dan menyusun bata</b> <i>Bricklaying and stone setting</i>
43905 :	<b>Pembinaan kolam renang luar bangunan</b> <i>Construction of outdoor swimming pools</i>
43906 :	<b>Pembersihan menggunakan stim, pancutan air deras berpasir dan aktiviti seumpamanya untuk luar bangunan</b> <i>Steam cleaning, sand blasting and similar activities for building exteriors</i>
43907 :	<b>Penyewaan jentera dan peralatan pembinaan dengan operator (cth. kren)</b> <i>Renting of construction machinery and equipment with operator (e.g. cranes)</i>
43909 :	<b>Aktiviti pembinaan pertukangan khas lain t.t.t.l.</b> <i>Other specialised construction activities, n.e.c.</i>