

## **Management of building construction**

### **A. Architects**

By the end of 2013, there were 3,627 architect offices, which increased 2.1% in comparison with 3,554 in 2012. The number of architects in practice is 3,720 which increase 2.1% in comparison with 3,643 in 2012, and the number of Class B architects (licensed according to Article 53 of the Architects Act) is 22. When compared in terms of each county (city), most of the architects are in the Five Special Municipalities and Taoyuan County. Taipei City has the most architects: 1,285 architects, 1,361 people; 566 architects, 574 people in Taichung City, 510 architects, 513 people in New Taipei City, 351 architects, 354 people in Kaohsiung City, 240 architects, 242 people in Tainan City and 171 architects, 171 people in Taoyuan County. The 6 cities/counties above cover 86.1% and 86.4% of all architects and architects in practice. It shows that the request in the space of buildings in urban area is rarely high due to centralization of population. With the convenience of information and traffic, urban city becomes the area for architects in practice centralized.

### **B. Construction Industry management**

According to the Construction Industry Act, construction is divided into comprehensive construction enterprises, specialized construction enterprises and civil engineering contractors. Comprehensive construction enterprises are categorized into three groups: A grade, B grade and C grade. By the end of 2013, the number of construction companies, exclusive of the companies without renewing certificates after Construction Industry Act was enacted, was 16,769. With the limitations in founding threshold and regulations in Construction Industry Act, there were 6,450 companies of C grade comprehensive construction enterprises (38.5%), 6,412 companies of civil engineering contractors (38.2%), 2,294 A grade comprehensive construction enterprises (13.7%), 1,244 B grade comprehensive construction enterprises (7.4%) and 369 companies of specialized construction enterprise (2.2%). When compared in terms of each county(city), most of the construction companies are in the Five Special Municipalities and Taoyuan County. Taichung has the most companies. There are 2,246 companies (13.4%) in Taichung City, followed by 2,051 companies (12.2%) in Kaohsiung City, and 1,983 companies (11.8%) in New Taipei City.

In terms of total capital, the capital of the whole construction was 651,670,000,000 dollars: A grade comprehensive construction enterprises had 49.2% of the whole capital, specialized construction enterprises had 40.9%, followed by 5.3% of C grade and 3.3% of B grade. The total investment of civil engineering contractors constituted as few as only 1.2%.

In terms of construction companies' average capital, the average amount for each company was 38,860,000 dollars by the end of year 2013. There thus has concluded a comparison results that in terms of geological location, mainly in Taipei City and Kaohsiung City, the average capital for each city reaches 173,090,000 and 116,670,000 dollars, followed by 23,630,000 dollars in Hsinchu County.

### **C. Safety inspection in lifting equipment of buildings**

By the end of 2013, there were 8 institutions of safety inspection in lifting equipment of buildings, including 6 institutions in Taipei City, 1 in Taichung City and 1 in Kaohsiung City and 488 specialized companies which increased 3.4% in comparison with 472 in previous year (2012). When compared in terms of each county (city), most of the specialized companies are in the Five Special Municipalities and Taoyuan County. Taipei City had the most specialized companies –106 (21.7%), followed by 84 companies in New Taipei City (17.2%) and 78 companies in Taichung City (16.0%). There were 7,807 professional technicians which increased 5.0% in comparison with 7,434 in 2012. When compared in terms of each county (city), most of the professional technicians are in the Five Special Municipalities and Taoyuan County; 4,547 in Taipei City (58.2%), 802 in New Taipei City (10.3%), and 581 in Kaohsiung City (7.4%)

The number of the inspected lifting equipments in 2013 is 157,179, which increased 13.5% in comparison with 138,434 in 2012. The qualified case number of the inspected lifting equipments was 157,175, nearly 100%. The cities and counties which had over ten thousand inspected lifting equipments were: 36,033 in New Taipei City (22.9%), 34,362 in Taipei City (21.9%), 20,773 in Kaohsiung City (13.2%), 20,100 in Taichung City (12.8%), and 13,772 in Taoyuan County (8.8%) ; in addition, the five counties and cities had 79.6% of the inspected amount.

### **D. Safety inspection in mechanical recreation facilities**

The recreation center will be deregulated if mechanical recreation facilities were removed completely. In year 2013, one city (county) for recreation center was deregulated individually in each of Taoyuan County (1). Therefore, by the end of 2013, the number of recreation center was 27, 1 less than the 28 of last year; 22 were in business and 5 had been suspended by the enterprise.

The number of mechanical recreation facilities totaled up to 244, however, 204 were still running, 40 have been suspended, 205 in business have duly obtained building licenses, in which use of recreation facilities in 7 centers was suspended even though they had obtained a usage license, and 6 in Taipei Children's Recreation

Center have not obtained the usage license yet. Taipei City Government allows the business with special signature. The facilities and equipments are maintained with records and processed with safety inspection periodically.

#### **E. Safety inspectors of buildings**

By the end of 2013, the number of safety inspectors of fire prevention facilities in buildings was 3,203, followed by 3,127 of equipment inspection staff. The architects of various expertise amounted to 2,482 and 2,480, ranking the first, followed by 119 electronic engineering technicians and then 111 civil engineers. When compared with that of previous year (2012), the amount of structure technicians, Mechanician, architects and civil engineers increased, and that of electronic engineering technician, and air-conditioning technicians remained unchanged.

#### **F. Building interior construction**

There were 5,906 building interior construction companies by the end of 2013 which increased 7.8% in comparison with 5,477 in 2012; 4,057 design construction factories (68.7%) and 1,781 construction factories (30.2%). In terms of geographical locations, Taipei City had the most companies –2,241 (37.9%), followed by 1,093 in New Taipei City (18.5%) and 779 in Taichung City (13.2%). There were 16,180 construction specialists which increased 5.4% in comparison with 15,357 in 2012; 10,262 of professional design construction specialists (63.4%) and 5,461 professional construction specialists (33.8%). In terms of county/city, Taipei City had the most construction specialists at 4,943 (30.6%), followed by New Taipei City at 2,801 (17.3%) and Taichung City at 2,213 (13.7%).

#### **G. Parking spaces in the buildings**

There were 3,967,839 parking spaces in the buildings by the end of 2013; 66,510 for large vehicles (1.7%), 3,175,054 for automobiles (80.0%), 726,275 for motorcycles (18.3%). In terms of geographical locations, Taipei City had the most parking spaces of 1,003,366 (25.3%), followed by New Taipei City, 568,575(14.3%), and Taoyuan County, 487,820 (12.3%). The number of the above parking spaces in the urban development project areas was 3,631,749(91.5%) and 336,090(8.5%) parking spaces for in non-urban development project areas.

#### **H. Statistics of Advertisement Management**

The number of applying permission advertisement is 1,897 in 2013: 1,463 of signboard (77.1%) and 434 of vertical advertisement (22.9%). In terms of the

county/city, Taichung City had the most advertisement of 735(38.7%), followed by 511 in Taipei City (26.9%) and 214 in New Taipei City (11.3%). There were 9,794 of prosecution cases, in which 9,743 of removing and tearing (99.5%) is the highest, followed by 51 of fine (0.5%).

### **I. Management Companies in Apartment and Large Buildings**

By the end of 2013, the latest statistics indicates that the number of management companies in apartment and large buildings is 657, in which Taipei City has the highest number of 143(21.8%), followed by 139 in Taichung City (21.2%) and 119 in New Taipei City (18.1%). It has been required that both the administration and technology management staff shall pass the qualification and certification before getting the employment for handling such affairs since the duly enactment of Condominium Management and Ordinance (CMO) Act. The latest statistics indicate the amount and growth rate of employees with certification were 4,889. Among them, management staff and technicians are half and half; the technician category is composed of disaster prevention and building facility maintenance in which the former amounted to 41.7% and the latter, 58.3% respectively.

### **J. Removal of Illegal Constructions**

Buildings without legal permits (also called Illegal Construction) do not only damage the urban landscape beauty but also influence the sight of the city and endangered public security. According to Article 11 in Approaches of Illegal Constructions, the illegal construction must be processed based on the time of existence, the influence degree in city, transportation, and public security to be divided into the old and the new illegal constructions. The enforcement rules of the base date for separating the old from the new illegal constructions must be enacted duly according to the regulations of relevant competent authorities.

By the end of 2013, the number of illegal construction was 588,047 for the whole country. The new added unauthorized building was 53,992 and the removal of illegal construction was 31,219. The enforced supplementary application cases are 595. There were 22,178 more illegal construction cases in comparison with the amount of 565,869 and a growth ratio of 3.9% in 2012.

In terms of the county/city, New Taipei City had the most number of illegal construction, 183,082(31.1%), followed by Kaohsiung City, 117,070(19.9%) and Taipei City 82,950(14.1%). The number of illegal construction in these three cities and counties occupied 65% throughout the country. City/county with the number of illegal construction below 1,000 contained Taitung County, Lienchiang County and Penghu County. In which, Penghu County had the smallest number of 84 cases.

## **K. Issue of Construction Licenses**

33,531 Construction Licenses were issued in 2013 and compared with last year's figure, the number increased 7.3%. The total floor area was 39,760,495 square meters, which increased 20.9%.

In terms of county/city, Taoyuan County, which had 7,962,000 square meters (20.0%), had the most total floor area; followed by 5,641,000 square meters (14.2%) in New Taipei City, and 5,568,000 square meters (14.0%) in Taichung City. In comparison with last year, the total floor area increased the most in Taoyuan County by 3,280,000 square meters (70.1%), followed by 1,762,000 square meters (46.3%) in Taichung City and 737,000 square meters (15.0%) in New Taipei City. The three biggest decrease of areas were 276,000 (25.2%) in Hsinchu City, 46,000 (3.4%) in Changhua County and 41,000 (24.7%) in Penghu County.

In terms of the usages, Housing (including farmhouse) had 25,417,000 square meters (63.9%), Industry and Warehousing had 5,839,000 square meters (14.7%) and Business and Service had 1,983,000 square meters (5.0%).

In terms of the structures, 30,966,000 square meters were concrete construction, including steel concrete construction (77.9%), 5,762,000 square meters were steel construction (14.5%) and 2,775,000 square meters were steel reinforce concrete construction (7.0%).

## **L. Issue of Usage Licenses**

28,014 usage Licenses were issued in 2013, which increased 4.1% compared with last year's figure; the total floor area was 28,771,809 square meters (increased 3.6%).

In terms of county/city, New Taipei City had the most construction area: 4,234,000 square meters (14.7%), followed by 4,152,000 square meters in Taoyuan County (14.4%) and 3,828,000 square meters in Taichung City (13.3%). In comparison with last year, the three biggest increases of areas and increase ratios were: 1,028,000 (32.9%) in Taoyuan County and 384,000 (11.1%) in Taichung City and 314,000 square meters (13.6%) in Tainan City. The three biggest decreases of areas and their decrease ratios were: 595,000 (23.9%) in Taipei City and 344,000 (21.0%) in Hsinchu County and 214,000 square meters (7.4%) in Kaohsiung City.

In terms of the usages, Housing (including farmhouse) had 16,888,000 square

meters (58.7%), Industry and Warehousing had 5,086,000 square meters (17.7%), Business and Service had 1,946,000 square meters (6.8%).

In terms of the structures, 22,161,000 square meters were concrete construction, including steel concrete construction (77.0%), 3,896,000 square meters were steel construction (13.5%) and 2,495,000 square meters were steel reinforce concrete construction (8.7%).

In terms of the height, compared to last years' figures, this year's shows an increase. For the increasing, the floor area for the buildings over between 60-75 meters increased 75.1%, followed by 8.1% for the category of over 90 meters. For the decreasing, the floor area for the building over between 30-45 meters decreased 3.2%, followed by the decreasing of 1.8% for the category of between 7-15 meters.

In terms of high rise building over 15 floors, the total floor area of 15 floors or over 15 floors buildings was 6,617,000 square meters in 2013 and was about 23.0% of 28,772,000 square meters for the whole year, increased 15.7% in comparison with last year. New Taipei City had the square meters of 2,312,000, followed by Taoyuan County of 1,145,000 square meters, Kaohsiung of 974,000 square meters.